

Tivoli Common Reporting Version 3.1 Beta

*User Guide*





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**Note**

Before using this information and the product it supports, read the information in Notices.

**Second edition**

This edition applies to Tivoli Common Reporting and to all subsequent releases and modifications until otherwise indicated in new editions.

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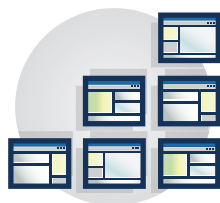
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## Chapter 1. Overview



Tivoli® Common Reporting provides an integrated reporting solution for the products in the Tivoli portfolio. You can link multiple reports across various Tivoli products to simplify the report navigation and accelerate access to key reporting information.

Tivoli Common Reporting provides the following advantages for the users:

**Simplified interaction**

Simplified interfaces and interactions for report writers with which you can create, customize, and publish reports faster and easier.

**Cross-product report linking**

Extend the capability of cross-product report linkage for seamless flow between related reports of various Tivoli products.

**On-demand reporting**

Enable report users to create and save ad hoc reports, without the need for professional report writer's involvement.

Tivoli Common Reporting 3.1 is based on Cognos® Business Intelligence Reporting version 10.1.1. The following Cognos components are available with Tivoli Common Reporting:

- Framework Manager - a modeling tool that allows you to create data models.
- Query Studio - a reporting tool for creating simple queries and reports.
- Report Studio - a web-based tool for creating sophisticated reports against multiple databases.
- Connection - an application where you can view and manage all your reports.

Tivoli Common Reporting 3.1 is based on Tivoli Integrated Portal 2.2.

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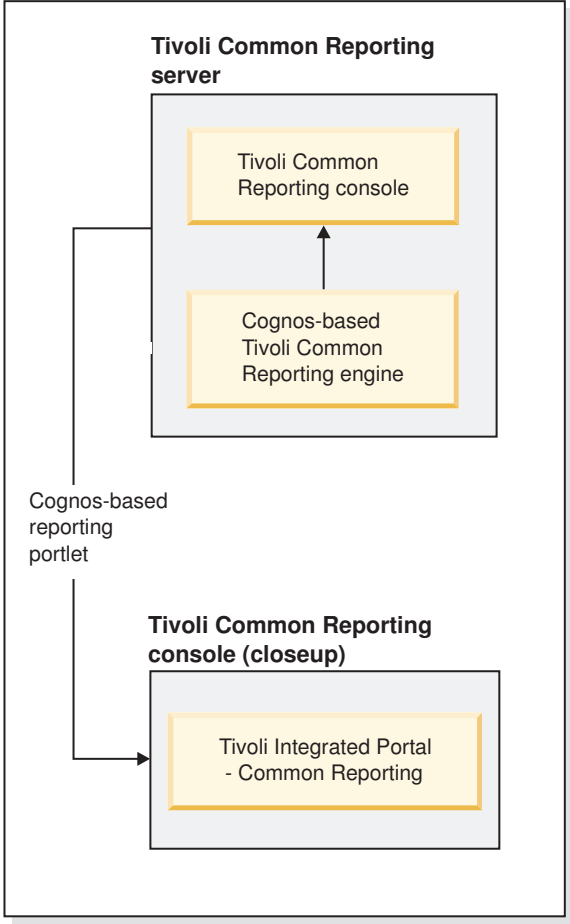
## Technical overview

IBM® Tivoli Common Reporting consists of data stores, reporting engines, their corresponding web user interfaces displayed in Tivoli Integrated Portal, and a command-line interface.

Tivoli Common Reporting provides a flexible structure that can be adapted for load balancing. The following diagrams illustrate the possible distributions of the product components:

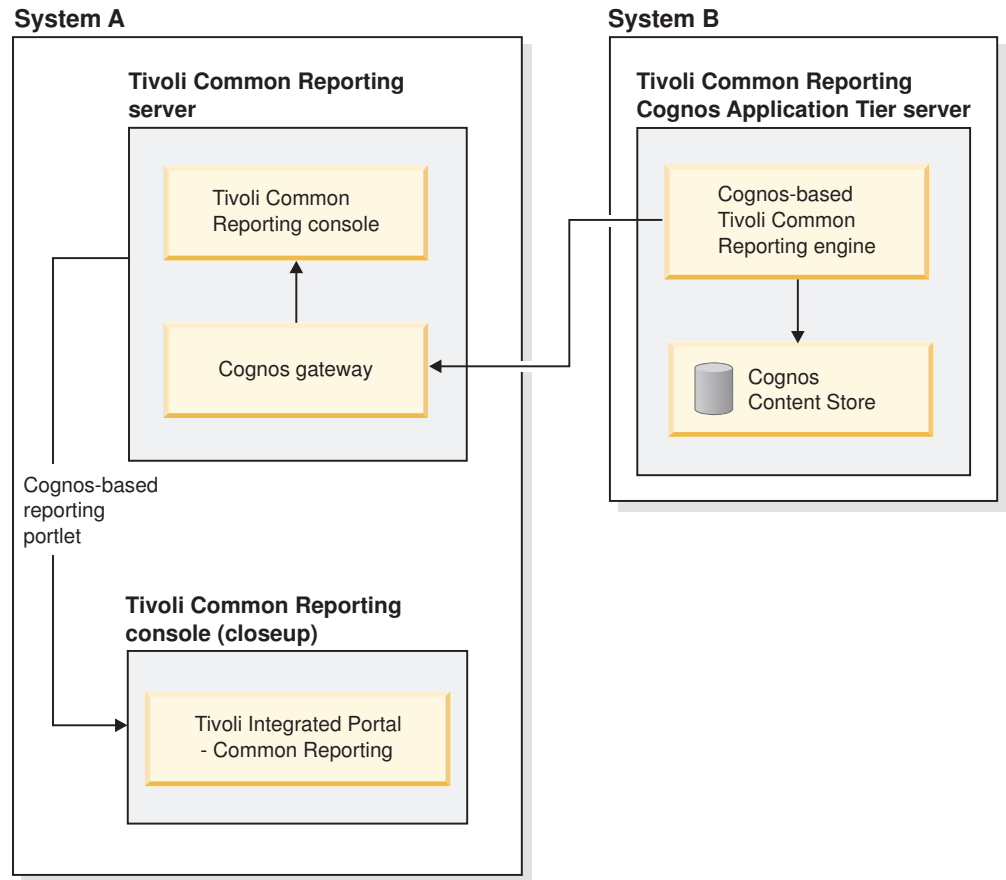
**Single computer:**

**System A**

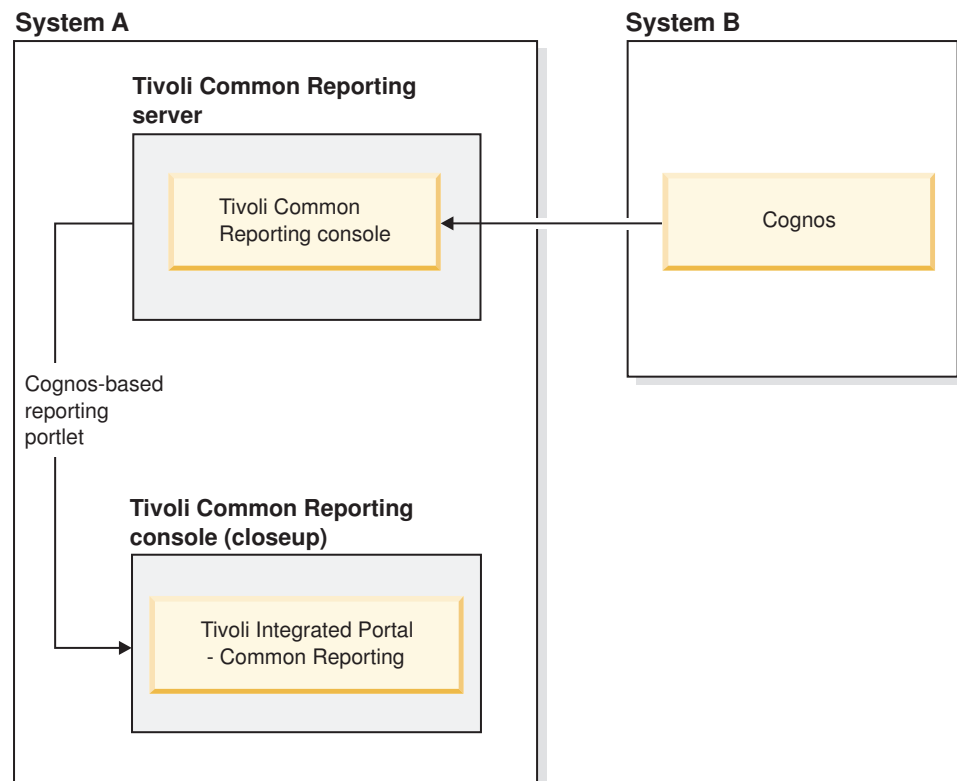


**Distributed environment:**





#### Integration with an existing Cognos instance:



**Note:** Tivoli Common Reporting version 3.1 is based on Cognos Business Intelligence Server version 10.1.1.

*Table 1. Software components*

Core components	Optional components
<p><b>Tivoli Common Reporting Server</b> The application server is a J2EE lightweight implementation of the embedded WebSphere® Application Server. It provides a single sign-on service based on the WebSphere security module and Lightweight Third-Party Authentication (LTPA).</p> <p><b>Cognos-based Tivoli Common Reporting engine</b> The dispatcher is the entry point for IBM Cognos service requests sent by a web server gateway or other software. The dispatcher handles the routing requests and balances the load of user requests to the various IBM Cognos services.</p> <p><b>Cognos gateway</b> A portal enabling communication between Tivoli Common Reporting Server and the Cognos-based Tivoli Common Reporting engine.</p> <p><b>Cognos Content Store</b> A database that contains data which IBM Cognos needs to operate. These data include report specifications, published models, and the packages that contain them; connection information for data sources; information about the external namespace, and the Cognos namespace itself; and information about scheduling and bursting reports.</p> <p><b>Tivoli Integrated Portal web user interface</b> Based on Tivoli Integrated Portal, the following web user interface is available for the reporting solution:</p> <ul style="list-style-type: none"> <li>• <b>Common Reporting</b> - a web portal for IBM Cognos and a component which interacts with the Cognos Content Store. It is a frontend to publish, find, manage, organize, and view the reports for your organization.</li> </ul>	<p><b>Tivoli Common Reporting Cognos Application Tier Server</b></p> <p><b>Cognos</b> An existing instance of IBM Cognos BI Server or IBM Cognos Business Intelligence Reporting.</p>

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## Web resources

Check out other useful web resources for Tivoli Common Reporting.

## Common Reporting

For more information about using the product or for technical assistance, visit the IBM Cognos Resource Center at Cognos support site. This site provides information about support, professional services, and education.

Take a look at the Cognos 10.1.1 information center at <http://publib.boulder.ibm.com/infocenter/cbi/v10r1m1/index.jsp>.

You can also visit Tivoli Common Reporting developer Works at <http://www.ibm.com/developerworks/spaces/tcr>.

For Beta information, forum, and code download, visit: <https://tivolibeta.lotus.com/tcr31>.

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## Getting started with reports

Perform the necessary actions to use the reporting options in Tivoli Integrated Portal as the common integrated reporting platform for products across the Tivoli portfolio. With the portfolio, you can link multiple reports across various Tivoli products to simplify the report navigation and accelerate access to key reporting information.

### Before you begin

1. Install Tivoli Common Reporting.
2. Install Framework Manager to be able to create your own data models.
3. Configure the Framework Manager connection to Tivoli Common Reporting.

### About this task

After you install Tivoli Common Reporting, prepare your report packages to be able to generate, publish, and edit your reports.

### Procedure

1. If you have the report packages ready, import the report packages:
  - Import Cognos report packages.
  - Import BIRT report packages.
- a. Create or update your data sources:
  - For Cognos report packages, configure the database connection.
  - For BIRT report packages, ensure that the report package data sources point to the existing data sources. Use the “trcmd -list” on page 95 command to see your data source settings, and the “trcmd -modify” on page 97 command to modify them, if necessary.

**Tip:** BIRT reports are separate from Cognos, predefined reports to which you can make simple changes. You can also create or modify report designs with the use of an open source BIRT report designer. The designer is not shipped with Tivoli Common Reporting but is available for downloading.

2. To create a report package:
  - a. Configure the database connection.
  - b. Create a data model in Framework Manager.

**Tip:** For more instructions, see the Framework Manager User Guide in Cognos information center.

- c. Import the metadata from your data sources. When you import the metadata, you can start modeling in Framework Manager. You can define the relations between objects such as tables, views, and queries, you can select the layers to define which objects you want to make visible, you can define what you want to publish, and finally, you can create and publish a package containing the model and reports. For more information, see Framework Manager User Guide. When you configure the connection between Framework Manager and Tivoli Common Reporting, the published package is automatically pushed to Tivoli Common Reporting and you can see it in its respective folder inside Tivoli Common Reporting.
- d. Log on to the reporting interface and select **Launch** → **Query Studio** to test your model and create simple ad hoc reports, or select **Launch** → **Report Studio** to create more complex reports.
- e. Create a final package.

## Logging on to the reporting interface

Use your web browser to access the reporting interface based on the Tivoli Integrated Portal.

### About this task

With the reporting interface, you can perform simple lightweight tasks as well as more advanced scalable reporting.



#### Common Reporting

Scalable, enterprise reporting option provided by IBM Cognos Business Intelligence Reporting.

Using this feature you can access, among others, the following reporting options:

- Create on-demand reports.
- Use the Web-based report authoring.
- Email reports.

**Tip:** To access Tivoli Common Reporting or Tivoli Integrated Portal documentation from the user interface, click **Help** in the upper right corner. To access Cognos

Administration and Security guide, click  in the console. For more Cognos guides, click .

### Procedure

1. Browse to the following URL:

`http://hostname:port/ibm/console`

The default URL is:

`http://localhost:16310/ibm/console`

- Replace *hostname* with the TCP/IP host name of the system where Tivoli Common Reporting is installed, or `localhost` if you are running the web browser on the same system.
- Replace *port* with the port number that you specified during installation.

2. On the Tivoli Integrated Portal login page, log in with a user ID that has access to Tivoli Common Reporting. Access is determined by user roles associated with user IDs. The role that you need to access Tivoli Common Reporting is `tcrPortalOperator`. It might be the user ID and password you specified during the installation process, or a user ID and password provided to you by an administrator. The Tivoli Integrated Portal navigation window opens.

**Tip:** To eliminate the security warnings when logging on to the user interface, install a certificate on the Tivoli Common Reporting server. To install the certificate, follow the instructions in WebSphere information center.

3. In the navigation pane on the left side of the window, click the plus sign + beside **Reporting** to expand the tree.
4. Choose **Common Reporting** to work with the enterprise reporting options.

### Single sign-on (SSO)

Single sign-on (SSO) is the ability of a user to log on once and access multiple applications without having to log on to each application separately. Multi-server session-based authentication allows web application users to log on to WebSphere Application Server, and then access WebSphere Application Server of another application (in the same DNS domain) that is enabled for single signon without having to log in again.

The server is configured to use the Lightweight Third-Party Authentication (LTPA) authentication. When logging in, the user is prompted for a name and password which can later be reused. When the user is authenticated, the browser receives a token which is stored for a specific session. When the LTPA token is received and the user tries to access the server in the same security domain, the authentication is automatic. This means that the user is not prompted for a name and password, if the browsing session was not terminated.

IBM Tivoli Common Reporting is available from the enhanced WebSphere Application Server. This is why a client requesting that application can be required to perform multiple logons when accessing other secure applications, such as advanced reporting. Each logon might require different logon identities.



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## Chapter 2. Installing



A complete Tivoli Common Reporting installation comprises multiple components. Before installing one or more of these components, you must understand them and the installation process.

---

### Hardware and software requirements

Tivoli Common Reporting is available on a range of operating systems and supports several browser types.

**CAUTION:**

**Before you install Tivoli Common Reporting, run Prerequisite Scanner to ensure that you meet all the necessary hardware and software requirements.**

**Prerequisite Scanner is a tool that checks the configuration of your environment and detects missing prerequisites. Extract the package, and run the `TCR.sh` script.**

*Table 2. Hardware and software requirements.*

**Hardware requirements:**

- Main memory - 3 GB
- Processor speed - for best performance, processor speeds must be at least 2 GHz for Intel® architectures. Choosing faster processors results in improved response time, greater throughput, and lower processor utilization.
- Disk storage:
  - **For single-computer installation** - up to 4.5 GB, depending on installation options selected.
  - **Temporary directory** - 2 GB.

**Note:** The optional, separately installed IBM Cognos 10 Business Intelligence Framework Manager component requires additional disk space of 700 MB.

Table 2. Hardware and software requirements. (continued)

**Supported operating systems:**

**Tip:** The platform on which you install Tivoli Common Reporting might limit the supported data sources for reporting. For a list of supported data sources by platform, see: <https://www-304.ibm.com/support/docview.wss?uid=swg27021368#db>.

Linux

Red Hat

**Red Hat Enterprise Linux**

**Important:** Because Tivoli Common Reporting installs some 32-bit binary files even with 64-bit installers, you must install the 32-bit versions of the prerequisite libraries, even on 64-bit systems. Otherwise, the installation fails. Run Prerequisite Scanner to ensure that you meet all the necessary hardware and software requirements. Prerequisite Scanner is a tool that checks the configuration of your environment and detects missing prerequisites. Download the latest version of Prerequisite Scanner for UNIX from IBM Support Site, extract the package, and run the TCR.sh script.

- Red Hat Enterprise Linux versions 5.1 to 5.7 32-bit and 64-bit  
**Restriction:** The following system libraries must be installed:
  - Compatibility Libraries
- Red Hat Enterprise Linux versions 5.2 to 5.7 - zSeries/System z 31-bit and 64-bit

Linux

SUSE

**SUSE**

- SUSE Linux Enterprise Server 10.0 - x86 32-bit and 64-bit  
**Restriction:** The following system libraries are required to run Tivoli Common Reporting:
  - compat-32bit
  - compat-libstdc++
  - openmotif-libs-32bit-2.2.4
- SUSE Linux Enterprise Server 11.0 - x86 32-bit and 64-bit  
**Restriction:** The following system libraries are required to run Tivoli Common Reporting:
  - libstdc++33-32bit-3.3.3-11.9
  - compat-32bit-2009.1.19-2.1
  - openmotif22-libs-32bit-2.2.4-138.18.1
- SUSE Linux Enterprise Server 10.0 System z® 31-bit and 64-bit
- SUSE Linux Enterprise Server 11.0 System z 64-bit  
**Restriction:** The following system libraries are required to run Tivoli Common Reporting on SUSE systems:
  - libstdc++33-32bit-3.3.3-11.9
  - compat-32bit-2009.1.19-2.1
  - openmotif22-libs-32bit-2.2.4-138.18.1

Windows

**Microsoft Windows**

- Microsoft Windows Server 2003 R2 Enterprise Edition 32-bit and 64-bit
- Microsoft Windows Server 2008 R2 Standard Edition 64-bit
- Microsoft Windows Server 2008 Standard Edition 32-bit and 64-bit
- Microsoft Windows Server 2008 Enterprise Edition 32-bit and 64-bit

**Deployment Engine:**

400 MB in the /usr directory or your home directory

at least 1 MB in the /var directory

**Important:** If you are installing on a non-Windows operating system, and you have the var and usr directories mounted on a different partition, ensure that the partition is not empty. Otherwise, the Deployment Engine will not install.



Table 2. Hardware and software requirements. (continued)

**Supported web browsers:**

- Windows Internet Explorer version 7 or 8 on Microsoft Windows  
**Tip:** For some operations, the browser security settings are too restrictive. See the Troubleshooting Internet Explorer 7 section of the information center for additional security configuration of the Internet Explorer browser.
- Mozilla Firefox version 3.6

## Installation scenarios and installation modes

You can choose from the following installation modes:

- **Install new instance of Tivoli Common Reporting**

You can install Tivoli Common Reporting version 3.1 using either a 64-bit installer or a 32-bit installer.

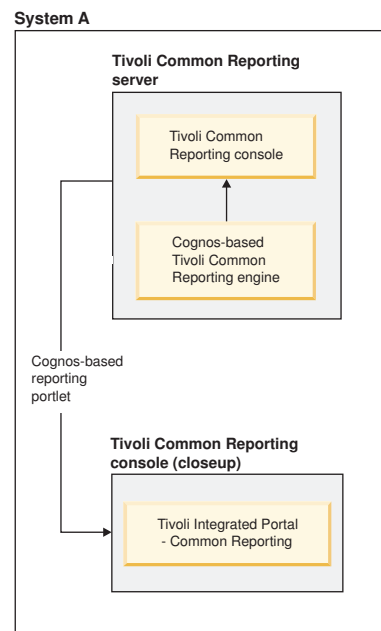
**Important:** The 64-bit installer can only be used for a stand-alone Tivoli Common Reporting installation

The following installation scenarios are available:

- Single-computer installation

When you install Tivoli Common Reporting, you must use the Federated Repository to authenticate users. The authentication mechanism can be the built-in default repository, LDAP, Active Directory, or other repository supported by the WebSphere Federated Repository. For more information about adding a repository, see “Configuring LDAP or Microsoft Active Directory” on page 29.

### Scenario A: Single-computer installation



Use this scenario for non-scalable, lightweight reporting with all the components installed on a single system.

By default a file-based user registry from embedded WebSphere Application Server is used as a user repository and the communication takes place using Anonymous access. After installing Tivoli Common Reporting, you can configure a different user repository and disable anonymous access.

---

## Tivoli Common Reporting installation paths

Learn about the location of the Tivoli Common Reporting installation directories that depends on the installation scenario. The installation paths in version 3.1 remain the same as the installation paths in version 2.1 and 2.1.1.

### Changes in Tivoli Common Reporting version 3.1

The structure of the directories into which Tivoli Common Reporting 3.1 is installed is the same as in version 2.1.1 and results from Tivoli Integrated Portal on which Tivoli Common Reporting is based. The installation directory is divided into two catalogs - one containing Tivoli Integrated Portal only, and the other containing Tivoli Integrated Portal-based components and products. This solution makes upgrading to a higher version of Tivoli Integrated Portal easier.

During the installation of the reporting engine, only one directory is created, as the reporting engine is not a Tivoli Integrated Portal-based component.

### Installation directories

The following installation directories are created for default Tivoli Common Reporting stand-alone installation:

- The directory that contains the uninstaller and the installation log files. In documentation, it is referred to as *TCR\_install\_dir*.  
Windows operating systems: C:\IBM\tivoli\tcr  
Non-Windows operating systems: /opt/IBM/tivoli/tcr
- Tivoli Integrated Portal installation directory, referred to as *TIP\_install\_dir*:  
Windows operating systems: C:\IBM\tivoli\tipv2  
Non-Windows operating systems: /opt/IBM/tivoli/tipv2
- *TIP\_components\_dir* directory containing Tivoli Integrated Portal components. Tivoli Common Reporting is one of Tivoli Integrated Portal components but there might be others installed as well:  
Windows operating systems: C:\IBM\tivoli\tipv2Components  
Non-Windows operating systems: /opt/IBM/tivoli/tipv2Components
- Tivoli Common Reporting is in the TCRComponent directory, in the documentation referred to as *TCR\_component\_dir*:  
Windows operating systems: C:\IBM\tivoli\tipv2Components\TCRComponent  
Non-Windows operating systems: /opt/IBM/tivoli/tipv2Components/TCRComponent

### Cognos installation directory

The directory that Cognos is installed into is called *c10\_locations* and can be found in the following locations:

- For a single-computer installation and for the user interface of the distributed installation: *TCR\_component\_dir\cognos*.
- For the reporting engine of a distributed installation: *TCR\_install\_dir\cognos*

---

## Preparing to install

Verify that your environment meets basic requirements for an IBM Tivoli Common Reporting installation. The installation program automatically verifies most requirements but you must check some prerequisites manually.

### Verify the environment

Tivoli Common Reporting comprises a collection of components and applications that work together to form a powerful reporting system. You must ensure that you meet the requirements for all the product components.

#### About this task

These steps help you prepare for Tivoli Common Reporting installation.

#### Procedure

- Make sure that you meet the prerequisites before you start to install the product. Run Prerequisite Scanner available in the Tivoli Common Reporting package to verify if your configuration meets hardware and software requirements. Prerequisite Scanner is a tool that checks you environment and detects missing prerequisites before you start installing Tivoli Common Reporting. To run the Prerequisite Scanner, extract the package and run the *TCR.sh* script.
- Verify the Hardware and software requirements.
- Choose your installation scenario.
- To install Tivoli Common Reporting into an existing Cognos BI infrastructure, you will require the URL to the existing Cognos engine that you want to integrate.
- On UNIX operating systems, ensure that your *localhost* network address resolves to 127.0.0.1 during the installation. To do this, edit the */etc/hosts* file to contain 127.0.0.1 *localhost*.
- Make sure that you have a range of 14 port numbers free, starting with the port number you enter during an interactive installation wizard (GUI or console mode). The default port number for the installation program which starts the sequence is 16310. However, in the silent installation mode, you can manually assign ports for each application server component. Therefore, the server installed in silent mode might not use 14 subsequent port numbers. In that case, make sure all the ports selected during silent installation are free. Additionally, by default, port 1527 is used by the embedded Content Store database of the IBM Cognos application, and port 9300 is used during a distributed installation on the reporting engine system. Also the 9362 port is used for reporting component logging.
- If you are installing on a non-Windows operating system, it is recommended to have the following settings applied to the system where you want to install Tivoli Common Reporting:
  - *Ulimit Stack* set to 2048
  - *Max user processes limit* set to 256000
  - *Open files limit* set to 32768

For **Linux**, **HP-UX**, and **Solaris** operating systems, you can set these values with the **ulimit** command:

**ulimit -n**

The maximum number of open file descriptors.

**ulimit -s**

The maximum stack size.

**ulimit -u**

The maximum number of processes available to a single user.

**Tip:** On Linux operating system, you can configure the open file limits globally. To do this, open the `/etc/security/limits.conf` file and add the following line:  
\* hard unfile 2048.

For **AIX** operating systems:

- Change or add the **nofiles=XXXXXX** parameter in the `/etc/security/limits` file, or use the **chuser nofiles= XXXXX user\_id** command.
- Change the **stack** option in the `/etc/security/limits` file.
- Set the AIX® **maxuproc** device attribute by running the following command:  
`chdev -l sys0 -a maxuproc='256000'.`

## Preparing installation media

IBM Tivoli Common Reporting includes installation media for the Cognos-based Tivoli Common Reporting engine version 10.1.1 and prerequisite software.

There are two forms of installation media:

- Product disks.
- Installation images which licensed customers can download from the IBM Passport Advantage® website.

Tivoli Common Reporting installation media for Windows operating systems also contain Framework Manager installer.

Tivoli Common Reporting 3.1 installation media contain a 32-bit and a 64-bit installer.

### Procedure

1. **Linux** and **UNIX** Log on as the same user used to install the full Tivoli Common Reporting product.
2. Place all the downloaded installation images in a single directory on the computer where you are installing. For example  
**Windows** `C:\install_images`  
**Linux** and **UNIX** `/install_images`
3. Extract the contents of all installation images to the directory that you created.

**Attention:** **UNIX** On UNIX platforms, it is best to extract the installation files using the Gnu tar command. The standard tar command cannot handle long path names in the download package and a tar expansion error might occur. To avoid this, install the GNU tar package for your platform. You can download it from the Tar download page. **AIX** : Download the GNU tar from the IBM AIX Toolbox website.

Verify that the system path variable contains both native UNIX tar and GNU tar paths, and that the GNU tar path is defined before the native UNIX tar path. For example, the native tar utility is installed in /usr/bin and the GNU tar utility is installed in /opt/freeware/bin/tar. If you set a symbolic link to overwrite the native UNIX tar command with the GNU tar command, you will encounter an error.

## What to do next

The installation images are now ready.

## Validation of additional disk space required for the installation process

Installing Tivoli Common Reporting involves the validation of additional disk space required for both temporary directory (**TEMP**) and the target installation directory in which Deployment Engine is installed.

**Important:** This topic describes **additional** disk space required to successfully finish the installation process. The main disk space required for the installation of Tivoli Common Reporting is described in the **Hardware and software requirements** section of the Installation Guide.

### Procedure

1. **UNIX** :
  - a. Disk space required for the **TEMP** folder is checked - the space required is 800 MB.

**Note:** Additional disk space in the **TEMP** folder is required only for the time of the installation.
  - b. Disk space required for the installation of Deployment Engine is checked:

**Note:** Deployment Engine drives the installation process and stores information about the installed components after the process is finished.

**Note:** Deployment Engine might already exist on your hard disk drive.

    - If you are installing as root and /var and /usr are on the same partition, the disk space required is 255 MB.
    - If you are installing as root and /var and /usr are on different partitions, the disk space required is 5 MB on the /var partition and 250 MB on the /usr partition.
    - If you are installing as non-root, the disk space required is 255 MB on the home partition (for example, /home).
2. **Windows** :
  - a. Additional disk space required for the installation of Deployment Engine in the target installation location is 255 MB.

- b. If the **TEMP** folder is on the same partition as the target installation directory, the installation requires additional 800 MB on this partition.
- c. If the **TEMP** folder is on a different partition than the installation directory, the installation requires 800 MB on that partition.

---

## Installing Tivoli Common Reporting Beta

Install the reporting component to start working with your reports. The installation is a silent process that uses a response file. Once you edit the file with the required parameters, no interaction on your part is required.

### Before you begin

1. Install open service delivery platform WebSphere Application Server 8.0.0.2 64-bit.
2. Install Tivoli Integrated Portal 3.1 64-bit in a WebSphere Application Server profile with the following parameters:
  - Profile location: /opt/IBM/WebSphere/AppServer/profiles/TIPProfile for Linux or C:\Program Files\WebSphere\AppServer\profiles\TIPProfile for Windows.
  - Profile name: TIPProfile
  - Node name: TIPNode
  - Server name: server1

### Procedure

1. Download a Tivoli Common Reporting Beta installation image specific to your operating system from the FTP server. The following images are available:
  - For Linux platforms: IBM-TCR-3.1-beta-linux64.tar.gz
  - For Windows platforms: IBM-TCR-3.1-beta-windows64.zip
  - Framework Manager: IBM-TCR-3.1-frameworkmanager-beta-windows.zip
  - IBM Cognos Mobile: IBM-CognosMobile-multiplatform64.tar.gz containing the mobile application for both Linux and Windows platforms.
2. Extract the installation image to a temporary directory on your computer.
3. Run Prerequisite Scanner to ensure that you meet all the hardware and software requirements:
  - a. Go to the PrerequisiteScanner directory of the installation image.
  - b. Run TCR.sh (Linux) or TCR.bat (Windows).
4. Edit the TCR\_sample\_response\_osdp.txt response file from the TCRInstaller directory of the extracted image using a text editor. Set the following parameters:
  - **LICENSE\_ACCEPTED=true** to accept the software license.
  - **TCR\_INSTALLATION\_DIRECTORY=**. The default directory is /opt/IBM/TCR for Linux and C:\Program Files\IBM\TCR for Windows.
  - **WAS\_INSTALLATION\_DIRECTORY=**, which must point to the actual WebSphere Application Server home directory. The default location is /opt/IBM/WebSphere/AppServer for Linux and C:\Program Files\WebSphere\AppServer for Windows.
  - **OSDP\_HOME\_DIRECTORY=**. The default open service deliver platform installation directory is /opt/IBM/IOSDP for Linux and C:\Program Files\IBM\IOSDP.
  - **WAS\_USER\_NAME=** and **WAS\_PASSWORD=**

Do not change the port numbers.

5. Issue the following command to start the installation:

- **Windows** `install.bat -f full_path_to_response_file -i silent`
- **UNIX** `install.sh -f full_path_to_response_file -i silent`

## Results

After the installation, the following directories are created:

- Tivoli Common Reporting installation directory (by default, /opt/IBM/TCR for Linux and C:\Program Files\IBM\TCR for Windows).
- Tivoli Common Reporting component directory (by default, /opt/IBM/WebSpher/AppServerComponents/TCRComponent for Linux and C:\Program Files\WebSphere\AppServerComponents\TCRComponent for Windows).

## What to do next

If you do not see the **Reporting** → **Common Reporting** menu in the Tivoli Integrated Portal navigation bar, configure the **tcrPortalOperator** role so that it is mapped on to the administrative user:

1. Log on to the Tivoli Integrated Portal.
2. From the navigation on the left, select **Console Settings** → **Roles** → **Roles**.
3. Select the **tcrPortalOperator** role and click the **Add** icon.
4. Search for the administrative user.
5. Select the user and click the **Add** icon.
6. Save your settings.

To verify if the role was assigned correctly:

1. Log out of Tivoli Integrated Portal and then log in again.
2. Go to **Console Settings** → **Roles** → **User Roles**.
3. Search for the administrative user. The **tcrPortalOperator** role shows as one of the roles assigned to the administrative user.
4. Check if you can see the **Reporting** → **Common Reporting** menu.

---

## Installing Tivoli Common Reporting mobile application

Work with your reports on your mobile device such as a smartphone or a tablet computer. Install Tivoli Common Reporting together with IBM Cognos Mobile and take the reports with you anywhere you go.

### About this task

With the mobile application, you can view your reports and interact with them on your mobile device. Install Cognos Mobile on the same computer where you installed Tivoli Common Reporting 3.1. Then, access your reports from a web browser on your mobile device.

The installation is a silent process that does not require your interaction. You can install Cognos Mobile for Tivoli Common Reporting installed on a single-computer or in distributed environment.

## Installing the mobile application for a single-computer Tivoli Common Reporting

Install the mobile application for Tivoli Common Reporting installed on a single-computer and work with your reports anywhere and any time you want. You can keep your mobile application up to date by installing available fix packs.

### Before you begin

- Install Tivoli Common Reporting 3.1 on a single computer and ensure that it is working properly.
- Buy a license for Cognos Mobile.
- Download the installation images.
- Extract the installation images on the same computer on which your Tivoli Common Reporting 3.1 instance is installed.

### Procedure

1. Open the *TCR\_component\_dir\mobile\response.ats* file and accept the license by entering I Agree=y in the IBM License Agreement and Non IBM License Agreement fields.

- Run the following command to install the Cognos Mobile application:

```
– Windows  
installMobile.bat Cognos_mobile_install_dir tipusername tippassword
```

```
– UNIX Linux  
installMobile.sh Cognos_mobile_install_dir tipusername tippassword
```

- Run the following command to install a Cognos Mobile fix pack:

```
– Windows  
installMobileFP.bat Cognos_mobile_fixpack_dir tipusername tippassword
```

```
– UNIX Linux  
installMobileFP.sh Cognos_mobile_fixpack_dir tipusername tippassword
```

*Cognos\_mobile\_install\_dir* is the path to the Cognos Mobile installation image that you downloaded. The path must contain the name of the operating system on which you are installing, for example: C:\Cognos 10.1.1\CognosMobile-32bit\cogmobmp\_10.1.1\_ml\win32.

*Cognos\_mobile\_fixpack\_dir* is the path to the Cognos Mobile fix pack installation image. The directory must contain the name of the operating system on which you are installing.

**Tip:** To see the usage and syntax information for the command, run it with **-help** as the only parameter, for example:

```
installMobile.bat -help
```

2. Verify if you can access the Cognos Mobile documentation:

- **Windows** : Check whether **IBM Cognos Mobile** is visible in **Start → All Programs → Tivoli Common Reporting 3.1.0 → Documentation → IBM Cognos Mobile**.
- **UNIX Linux** Check whether the *mob\_mtoc.html* documentation file exists in the following location: *TCR\_component\_dir/cognos/webcontent/documentation*.

3. Go to <http://hostname:16310/tarf/m/index.html> using a web browser on your mobile device to access Cognos Mobile.



**Tip:** You can find the log files in: *TCR\_component\_dir\mobile\logs* and *TCR\_component\_dir\cognos\logs\mob.log*.

## Installing the mobile application for distributed Tivoli Common Reporting

Use these instructions to install the mobile application for Tivoli Common Reporting 3.1 installed on separate computers or systems. You can also update the mobile application that you already installed with available fix packs.

### Before you begin

- Install Tivoli Common Reporting 3.1 in distributed installation and ensure that it is working properly.
- Buy a license for Cognos Mobile.
- Download the installation images.
- Extract the installation images on each of the computers where Tivoli Common Reporting components are installed.

### Procedure

1. On the computer where the Tivoli Common Reporting server is installed, open the *TCR\_component\_dir\mobile\response.ats*. Accept the license by entering I Agree=y in the IBM License Agreement and Non IBM License Agreement fields.
  - Run the following command to install the Cognos Mobile application:

```
– Windows  
installMobile.bat Cognos_mobile_install_dir
```

```
– UNIX Linux  
installMobile.sh Cognos_mobile_install_dir
```

- Run the following command to install a Cognos Mobile fix pack:

```
– Windows  
installMobileFP.bat Cognos_mobile_fixpack_dir
```

```
– UNIX Linux  
installMobileFP.sh Cognos_mobile_fixpack_dir
```

*Cognos\_mobile\_install\_dir* is the path to the Cognos Mobile installation image that you downloaded. The path must contain the name of the operating system on which you are installing, for example: C:\Cognos 10.1.1\CognosMobile-32bit\cogmobmp\_10.1.1\_m1\win32.

*Cognos\_mobile\_fixpack\_dir* is the path to the Cognos Mobile fix pack installation image. The directory must contain the name of the operating system on which you are installing.

2. Repeat the procedure from Step 1 on the computer where the Tivoli Common Reporting user interface is installed.

**Attention:** Specify the *tipusername* and *tippassword* when running the command to install Cognos Mobile.

3. Verify if you can access the Cognos Mobile documentation:

- **Windows** : Check whether **IBM Cognos Mobile** is visible in **Start → All Programs → Tivoli Common Reporting 3.1.0 → Documentation → IBM Cognos Mobile**.

- **UNIX** **Linux** Check whether the `mob_mtoc.html` documentation file exists in the following location: `TCR_component_dir/cognos/webcontent/documentation`.
4. Go to `http://hostname:16310/tart/m/index.html` using a web browser on your mobile device to access Cognos Mobile.

**Tip:** You can find the log files in: `TCR_component_dir/mobile/logs` and `TCR_component_dir/cognos/logs/mob.log`.

---

## Installing Framework Manager

Framework Manager is a modeling tool available for Windows operating systems for creating and modifying business views of data. The output of the Framework Manager is a package used for creating reports in Tivoli Common Reporting.

### About this task

Framework Manager is a Windows-based utility included in the Cognos Modeling product. The installation image for Cognos Modeling is on a separate installation media in the following location: `\CognosModeling\win32\issetup.exe`.

Beginning with Tivoli Common Reporting 2.1.1, you can install Framework Manager on a 64-bit computer but it must be installed in a separate directory from the 64-bit components.

### Procedure

1. Run the installation image: `\CognosModeling\win32\issetup.exe`
2. Provide all the necessary parameters.

**Note:** If you are installing the 64-bit Framework Manager, create a Framework Manager directory in the `TCR_component_dir` directory and select it as the Framework Manager installation path.

---

## Verifying the installation

After you install the reporting solution, access it in a web browser to verify its installation.

### Procedure

1. Log on to the Tivoli Integrated Portal, and verify that the reporting section is present in the navigation bar under **Reporting**. For instructions on logging in to the reporting interface, see the information center.

**Tip:** You are prompted for user ID and password when accessing the console from the Tivoli Integrated Portal.

2. Expand the **Reporting** section, click the **Common Reporting** section, and verify that the view in the right window opens up a new portlet.
3. Run the sample overview report that is provided with the reporting tool, and verify that it displays only information about this particular report.

---

## Post-installation tasks

See this section to find out how you can modify your existing Tivoli Common Reporting installation.

## Starting the Tivoli Common Reporting server

Start the Tivoli Common Reporting server to begin working with reports.

### About this task

**Note:** To start the server, log in as the same user that you used to install Tivoli Common Reporting.

### Procedure

1. Open the command-line interface.
2. Go to the following directories:
  - **Windows** `TCR_component_dir\bin` and run `startTCRserver.cmd`
  - **UNIX** **Linux** `TCR_component_dir/bin` and run `startTCRserver.sh`

It might happen that after starting Tivoli Common Reporting, the reporting engine is still initializing. For this reason, you can optionally specify the time to wait until the reporting engine initializes completely by providing the maximum timeout that you want to wait. To specify the waiting time use the `wait number of minutes` flag, for example:

```
startTCRserver.sh wait 5
```

to wait 5 minutes until the reporting engine initializes. If the reporting engine does not initialize in the specified number of minutes, the script stops monitoring the engine and exits. If the reporting engine initializes before the timeout, the script exists when it detects that the reporting engine has initialized.

**Tip:** The `startTCRserver.cmd` and `startTCRserver.sh` scripts start both the Tivoli Common Reporting server and the Cognos Content Store. You can start the server using Tivoli Integrated Portal scripts or other scripts, however those scripts do not start the Content Store. To start the server using a script other than the `startTCRserver` script, before you start the server, you must run additional commands to start the Content Store. For details, see the content of the `startTCRserver.cmd` and `startTCRserver.sh` scripts.

## Stopping Tivoli Common Reporting server

Stop the Tivoli Common Reporting server using the command-line interface.

### About this task

**Note:** To stop the server, log in as the same user that you used to install Tivoli Common Reporting.

### Procedure

1. Open the command-line interface.
2. Go to the following directories:
  - **Windows** `TCR_component_dir\bin` and run `stopTCRserver.cmd user_name password`
  - **UNIX** **Linux** `TCR_component_dir/bin` and run `stopTCRserver.sh user_name password`

**Tip:** The stopTCRserver.cmd and stopTCRserver.sh scripts stop both the Tivoli Common Reporting server and the Cognos content store. You can stop the server using Tivoli Integrated Portal scripts or other scripts, however those scripts do not stop the content store. If you want to stop the server using a script other than the stopTCRserver script, before you stop the server, you must run additional commands. For details, see the content of stopTCRserver.cmd and stopTCRserver.sh scripts.

## Configuring Tivoli Common Reporting content store for an enterprise database

Tivoli Common Reporting installs an embedded lightweight database to house reporting artifacts. However, it is recommended to use an enterprise database, such as DB2® instead. After Tivoli Common Reporting installation, configure the content store for an enterprise database.

### Procedure




1. Select a database that you want to use for the content store. See IBM Support website for supported databases.
2. Create the database.
3. Configure the database connectivity for the content store database.

**Note:** The directories for JDBC drivers are:

- For single-computer Tivoli Common Reporting installation:  
*TIP\_install\_dir*\profiles\TIPProfile\installedApps\TIPCell\IBM Cognos.ear\p2pd.war\WEB-INF\lib and *TCR\_component\_dir*\cognos\webapps\p2pd\WEB-INF\lib
  - For distributed installation, on the reporting engine systems:  
*TCR\_install\_dir*\cognos\webapps\p2pd\WEB-INF\lib
4. Set the flag in the web user interface to allow inclusion of user configuration in content store exports.
  5. Export the entire content store.

#### CAUTION:

Select the **Include user settings** box.

6. Stop Tivoli Common Reporting server.
7. Open IBM Cognos **Configuration** by:
  -  Going to **Start** → **All Programs** → **Tivoli Common Reporting 3.1** → **IBM Cognos Configuration**.
  -   Running the following command on a 32-bit installer:  
*TCR\_component\_dir*/cognos/bin/tcr\_cogconfig.sh, and the following command on a 64-bit installer: *TCR\_component\_dir*/cognos/bin64/tcr\_cogconfig.sh

For distributed installation, open IBM Cognos Configuration on each of the reporting engines.

8. Remove the existing content store in Cognos Configuration by right-clicking **IBM Cognos Content Store** in the left navigation area and selecting **Delete**.
9. Add the new content store into the Tivoli Common Reporting configuration.
10. Save your settings and exit **Configuration**.
11. Start the Tivoli Common Reporting server.

**Tip:** Wait around 15 minutes for the new tables to be created. If you do not see any new tables created in the database, check for errors in the `TCR_component_dir\cognos\logs\cogserver.log`.

12. Import the content store that you added in step 9.

**CAUTION:**

**Ensure that you selected to Include user settings.**

13. Edit the default user profile and set Tivoli as the default style.
14. Restart Tivoli Common Reporting. If it is a distributed installation, restart the reporting engine systems.
  - a. Stop the server.
  - b. Start the server.

**Related information**

 IBM Cognos Information Center - Guidelines for creating the content store.

## Enabling Cognos Application Firewall

After installing Tivoli Common Reporting, you can optionally enable the Cognos Application Firewall.

### About this task

After installing Tivoli Common Reporting, the Cognos Application Firewall is by default disabled. You can enable and configure the firewall. To find out more about the firewall and how to enable it, visit Cognos information center.

---

## Uninstalling

You can uninstall the report components using the graphical user interface, command-line interface, or in silent mode. It is also possible to remove components manually, for example if the uninstallation program was accidentally deleted or not completely installed.

**Remember:** Run the uninstallation procedure on each computer on which you installed the program components.

## Uninstalling using the silent mode

Use the silent uninstallation procedure for unattended uninstallation. It can be performed with the use of a response file. You can choose the silent mode of uninstallation by using *silent* argument for the `-i` parameter.

### Procedure

1. From the following location `TCR_install_dir/_uninst/TIPInstall22`, open, and edit the `TCR_sample_response_uninstall.txt` file with the user ID and password:

**Tip:** If WebSphere Application Server was stopped, you will not be asked for your password. If you forgot your password, you can stop Tivoli Common Reporting processes first, and then run the uninstallation. Your password will not be required.

```
##### {COPYRIGHT-TOP} ###
# OCO Source Materials
# 5724-T69
#
# © Copyright IBM Corp. 2011
```

```
#
# The source code for this program is not published or otherwise
# divested of its trade secrets, irrespective of what has been
# deposited with the U.S. Copyright Office.
##### {COPYRIGHT-END} ###
#####
##
## InstallAnywhere variables to configure the installation of Tivoli
## Common Reporting for Asset and Performance Management
##
## Usage: uninstall[.sh|.exe] -f<full path to this file> -i<installation mode>
##         available modes: silent
##                           console
##                           gui
##
## On Windows, uninstall.exe will return immediately. To avoid
## this, you should wrap the uninstall.exe command in a batch
## file.
##
## # sign is used here to comment out the lines that follow it
##
#####

#----
#---- Enter a WebSphere Application Server password.
#---- If the password is not provided, the uninstaller will fail.
IAGLOBAL_WASUserID=tipadmin
IAGLOBAL_WASPassword=
```

Save the file.

2. Evoke the silent uninstallation from a command-line interface by:
  - **Windows** Navigating to *TCR\_install\_dir\uninst\TIPInstall122*, and running the `uninstall.exe -i silent -f TCR_install_dir\uninst\TIPInstall122\TCR_sample_response_uninstall.txt` command.
  - **Linux** and **UNIX** Navigating to */TCR\_install\_dir/\_uninst/TIPInstall122*, and running the `uninstall -i silent -f TCR_install_dir/_uninst/TIPInstall122/TCR_sample_response_uninstall.txt` command.

**Important:** Provide the full path to the response file in your command.

## Results

You have now uninstalled Tivoli Common Reporting without any user interaction. You can verify the uninstallation procedure by going through the verification steps.

## Uninstalling Tivoli Common Reporting for mobile devices

Uninstall the Cognos Mobile application from your environment. The uninstallation is a silent process that does not require your interaction.

### Procedure

1. Go to the *TCR\_component\_dir\mobile* directory.
2. Run the following script:
  - **Windows** `uninstallMobile.bat tipusername tippassword`
  - **UNIX** **Linux** `uninstallMobile.sh tipusername tippassword`
3. Restart your computer to complete the uninstallation.

**Tip:** You can find the log files in: *TCR\_component\_dir\mobile\logs*.

## Uninstalling manually

In most cases, it is best to follow one of the other choices for uninstalling Tivoli Common Reporting. However, if the uninstallation program is not present or if an cancelled installation did not create a complete and functional uninstallation program, you can manually uninstall the product. Follow this procedure only on the computer where Tivoli Common Reporting Server was installed.

### About this task

Perform the manual uninstallation only when none of the standard uninstallation methods are possible.

### Procedure

1. Stop the Tivoli Common Reporting Server by navigating to the following directory in the command-line interface:

- **Windows** `cd TCR_component_dir\bin`, and running the `stopTCRserver.cmd user_name password` command.
- **Linux** and **UNIX** `TCR_component_dir/bin`, and running the `stopTCRserver.sh user_name password`.

#### Note:

- If the server does not stop, terminate Tivoli Common Reporting processes.
  - To stop the server, you must log in with the same user that you used to install Tivoli Common Reporting.
2. Remove the Deployment Engine by navigating to the following directory in the command-line interface:

#### CAUTION:

**Removing this component if you have other Tivoli Common Reporting or Tivoli Integrated Portal instances installed on your computer will prevent you from performing upgrades or reusing the programs. If you have other programs that use the Deployment Engine, they might not work properly after removing it. In this case, see: Uninstalling the Deployment Engine.**

#### Windows

- a. Open the command-line interface, and source the DE environment by evoking `C:\%Program Files%\IBM\Common\acsi\setenv.cmd`.
- b. Uninstall DE - `C:\%Program Files%\IBM\Common\acsi\bin\si_inst.bat -r -f`.

**Note:** If a DE operation ends abnormally, the command might fail. In such case, go to `DE_install_dir\acsi\logs` and delete all files whose file names begin with `.lock` then repeat the uninstallation of DE: `/usr/ibm/common/acsi/bin/si_inst.sh -r -f`.

- c. Remove database backup - `rmdir /s C:\%Program Files%\IBM\Common\acsi`.

#### Linux and UNIX

**Note:** For a non-root user Deployment Engine is at `<USER_HOME_DIR>/acsi*`. Follow the same steps modifying your file paths.

- a. Source the DE environment by evoking the following command:  
`. /var/ibm/common/acsi/setenv.sh`.

**Important:** Make sure that you include the . (dot and space) characters when running the command.

- b. Uninstall DE - `/usr/ibm/common/acs/bin/si_inst.sh -r -f`.

**Note:** If a DE operation ends abnormally, the `-r -f` command might fail. In such case, go to `DE_install_dir\asci\logs` and delete all files whose file names begin with `.lock`, then repeat the uninstallation of DE: `/usr/ibm/common/acs/bin/si_inst.sh -r -f`.

3. **Windows** Remove the registered services by following the steps:
  - a. Open **Control Panel** → **Administrative Tools** → **Services**, and find the following services:
    - Tivoli Integrated Portal - TIPProfile\_Port\_XXX service
    - Any IBM Cognos Content Database service.
  - b. Right-click on the service, and choose **Properties**.
  - c. Copy the property name enclosed in parentheses, for example "IBM WAS70Service - TIPProfile\_Port\_16310", and "IBM Cognos Content Database", and "IBM Cognos 8".
  - d. Open the command-line interface, and run the following command: `sc delete "IBM WAS70Service - TIPProfile_Port_16310"`, and `sc delete "IBM Cognos Content Database"`, and `sc delete "IBM Cognos 8"`.
4. In the file system, depending on the components that you want to remove, delete the following files:
  - To remove Tivoli Integrated Portal and Tivoli Common Reporting, delete:
    - `TCR_install_dir`
    - `TIP_install_dir`
    - `TIP_components_dir`
  - To remove Tivoli Common Reporting and leave Tivoli Integrated Portal, delete:
    - `TCR_install_dir`
    - `TCR_component_dir`
5. **Windows** Remove the shortcuts from menu **Start**. Right-click the **Tivoli Common Reporting 3.1** in the menu, and select to delete it.
6. **Windows** (Recommended) Restart your computer.

## Results

You have now finished performing manual cleanup of your environment.

## Verifying the uninstallation

Verify the uninstallation after you uninstalled using the graphical user interface, console, or silent mode.

### Procedure

1. Check that the Tivoli Common Reporting installation directories contain log files only, and the size of the remaining content does not exceed 30 MB.
2. **Windows** Check if there are any services registered for the program by opening **Control Panel** → **Administrative Tools** → **Services**, and searching for Tivoli Integrated Portal - TIPProfile\_Port\_XXX service.



3. If your Tivoli Common Reporting instance was the only component in Deployment Engine registry, verify if the Deployment Engine was removed completely.
4. If the Deployment Engine registry contained other components than Tivoli Common Reporting, verify that there are no entries related to Tivoli Common Reporting in the Deployment Engine registry, by listing the existing components:
  - **Windows** `C:\%Program Files%\IBM\Common\acsi\bin\listIU.cmd`
  - **Linux** and **UNIX** `/usr/ibm/common/acsi/bin/listIU.sh`
5. **Windows** Verify that there is no Tivoli Common Reporting entry in menu **Start**.

## What to do next

If any of the items were not removed correctly by the uninstallation procedure, remove them manually.



---

## Chapter 3. Configuring



Configure the IBM Tivoli Common Reporting that you installed to optimize its usage. Use the configuring section to learn how to set up data sources, and configure for high availability.

---

### Configuring LDAP or Microsoft Active Directory

After installation, you can configure a Lightweight Directory Access Protocol (LDAP) server or Microsoft Active Directory as a user registry.

Perform the following configuration steps depending on the installation scenario you selected:

Installation scenario	Configuration path
Single-computer installation	<ul style="list-style-type: none"><li>• See the "Configuring Tivoli Common Reporting server" topic to configure the server to communicate with an external repository.</li></ul> <p>If you choose to configure the Lightweight Directory Access Protocol (LDAP) user repository, gather the following LDAP server information:</p> <ul style="list-style-type: none"><li>• Server host name</li><li>• Server port number</li><li>• Bind distinguished name</li><li>• Bind password</li><li>• Distinguished name of a base entry</li><li>• PersonAccount entity type</li><li>• Base entity for PersonAccount</li><li>• Group entity type</li><li>• Base entry for group</li><li>• OrgContainer entity type</li><li>• Base entry for OrgContainer</li></ul>

Installation scenario	Configuration path
Distributed installation	<ul style="list-style-type: none"> <li>• On the computer with Tivoli Common Reporting user interface installed, configure the reporting server. See "Configuring Tivoli Common Reporting server".</li> <li>• On the computer with Cognos-based Tivoli Common Reporting engine installed, configure the reporting engine. See "Configuring the Tivoli Common Reporting engine."</li> </ul> <p>If you choose to configure the Lightweight Directory Access Protocol (LDAP) user repository, gather the following LDAP server information:</p> <ul style="list-style-type: none"> <li>• Server host name</li> <li>• Server port number</li> <li>• Bind distinguished name</li> <li>• Bind password</li> <li>• Distinguished name of a base entry</li> <li>• PersonAccount entity type</li> <li>• Base entity for PersonAccount</li> <li>• Group entity type</li> <li>• Base entry for group</li> <li>• OrgContainer entity type</li> <li>• Base entry for OrgContainer</li> </ul>

Installation scenario	Configuration path
Integrating existing Cognos BI infrastructure	<ul style="list-style-type: none"> <li>On the computer with Tivoli Common Reporting user interface installed, configure the reporting server. See "Configuring Tivoli Common Reporting server"..</li> <li>On the computer with IBM Cognos installed, configure the reporting engine. See "Configuring the Tivoli Common Reporting engine.</li> </ul> <p><b>Important:</b> The configuration of the existing IBM Cognos might already be set to a specified user repository. By performing these instructions you can modify it.</p> <p>If you choose to configure the Lightweight Directory Access Protocol (LDAP) user repository, gather the following LDAP server information:</p> <ul style="list-style-type: none"> <li>Server host name</li> <li>Server port number</li> <li>Bind distinguished name</li> <li>Bind password</li> <li>Distinguished name of a base entry</li> <li>PersonAccount entity type</li> <li>Base entity for PersonAccount</li> <li>Group entity type</li> <li>Base entry for group</li> <li>OrgContainer entity type</li> <li>Base entry for OrgContainer</li> </ul>

You must use the Federated Repository to authenticate users. You can use the built-in default repository, LDAP, Active Directory, or other repository supported by the WebSphere Federated Repository as the authentication mechanism.

## Configuring Tivoli Common Reporting Server

Configure the Tivoli Common Reporting Server to communicate with an external repository such as Lightweight Directory Access Protocol (LDAP) or Microsoft Active Directory.

### Before you begin

If you want all LDAP communications to be encrypted, you can specify SSL communications. If so, be sure to import the LDAP signer's certificate into the truststore of the Tivoli Common Reporting Server before starting this task:

1. Issue the following command:

```
wsadmin -profileName server_profile_name
-username tipadmin -password password
```

2. Run the following command to retrieve the certificate:

```
wsadmin>
$AdminTask retrieveSignerFromPort -host ldap_server_host_name
-port ldap_secure_port -keyStoreName trust_key_store_name
-certificateAlias alias
```

where

- **ldap\_server\_host\_name** is the host name of your LDAP server
- **ldap\_secure\_port** is the secure port of your LDAP server
- **trust\_key\_store\_name** is the name of the trust keystore in your WebSphere trust keystore.

3. Issue the following command to save the changes that you made to the configuration:

```
wsadmin> $AdminConfig save
```

4. Run `wsadmin>exit` to quit.

## Procedure

1. Log in as an administrative user.
2. To add an LDAP repository, open the Tivoli Integrated Portal administrative console by direct link: `https://hostname:port_number/ibm/console/secure/securelogin.do` (the default port number is 16316) or from Tivoli Common Reporting user interface: `https://hostname:port_number/ibm/console` (the default port number is 16311), from the navigation tree on the left, select **Settings** → **WebSphere Administrative Console**, and **Launch WebSphere Administrative Console**. When the console opens in a new window, perform the following steps:
  - a. Go to **Security** > **Global security**.
  - b. Select **Federated repositories** from the available realm definitions, then click **Configure**.
  - c. Click **Manage repositories** under **Related Items**. Then click **Add** to add an LDAP Repository.
  - d. Enter LDAP security setting information. The primary host name and the distinguished name must contain no spaces.
  - e. Select **Require SSL communications** for all LDAP communications to be encrypted.
  - f. Select **Centrally managed**.
  - g. Click **OK**
3. Return to **Global security** > **Federated repositories** and add an entry to the base realm:
  - a. Click **Add Base entry to Realm**.
  - b. Enter the distinguished name (DN) of a base entry that uniquely identifies this set of entries in the realm. This base entry must uniquely identify the external repository in the realm.
  - c. Click **OK**.

If multiple repositories are included in the realm, use the DN field to define an additional distinguished name that uniquely identifies this set of entries within the realm. For example, repositories LDAP1 and LDAP2 might both use `o=ibm,c=us` as the base entry in the repository. So `o=ibm,c=us` is used for LDAP1 and `o=ibm2,c=us` for LDAP2. The specified DN in this field maps to the LDAP DN of the base entry within the repository (such as `o=ibm,c=us b`). The base entry indicates the starting point for searches in this LDAP directory server (such as `o=ibm,c=us`).

4. Click **Global security**, and then click **Set as current** to mark the federated repository as the current realm. The Mark Federated repository must be set as current.
5. Apply and save the changes.

6. Restart the server to enable the configuration.
  - a. Stop the server.
  - b. Start the server.
7. Verify that the federated repository is correctly configured:
  - a. Go to the Tivoli Common Reporting user interface ([https://hostname:port\\_number/ibm/console](https://hostname:port_number/ibm/console)), expand the navigation tree, and click **Users and Groups > Manage Users**.
  - b. Select **User ID** from the **Search by** list.
  - c. Click **Search** to search Users in federated repository. This list includes users from both LDAP and the local file registry.

On the Tivoli Common Reporting Server, LDAP users are queried only by the **userid** attribute. When users are imported into LDAP using an LDIF file, an auxiliary class of type **eperson** and **uid** attribute is added to the LDAP user ID.

8. If you want to create a user in LDAP, click **Users and Groups > Manage Users**, then click **Create** and continue as for the previous step: Enter user ID, given name, family name, e-mail, and password.

## What to do next

If you intend to enable single sign-on (SSO) so that users can log in one time and then traverse to other applications without having to reauthenticate, see the Tivoli Integrated Portal information about how to configure SSO.

## Configuring Cognos-based Tivoli Common Reporting engine with LDAP

Configure the engine to use the same user repository as the Tivoli Common Reporting Server with the user interface. This procedure is recommended for large user repositories.

### About this task

If you installed your Tivoli Common Reporting on a single computer, the Tivoli Common Reporting VMMPProvider is used for LDAP by default, and no additional LDAP configuration is required. In the case of distributed installation, you must configure LDAP on both computers.

### Procedure

1. Open the IBM Cognos Configuration by running:
  - **Windows** **Start** → **All Programs** → **Tivoli Common Reporting 3.1** → **IBM Cognos Configuration**
  - **Linux** and **UNIX** `TCR_component_dir/cognos/bin/tcr_cogconfig.sh` for 32-bit installations, and `TCR_component_dir/cognos/bin64/tcr_cogconfig.sh` for 64-bit installations.
2. In the **Explorer** navigation on the left, go to **Security**, and right-click the **Authentication** section.
3. Select **New resource** → **Namespace...**
4. Type in a name, select the registry type from the expandable list, and click **OK**. New user registry is added to the list.
5. Select the entry that you created, and edit the fields required for configuration. You must provide different values depending on the type of user registry

selected. For details on how to configure the user registry, see *Configuring IBM Cognos Components to Use an Authentication Provider of IBM Cognos information center*.

- a. Set **Use external identity?** to **True** to enable single sign-on from the console to the reporting engine systems.
  - b. Set **External identity mapping** to `(uid=${environment("REMOTE_USER")})`. If you use your email address instead of a user ID to log on to the console, set the value to: `(mail=${environment("REMOTE_USER")})`.
  - c. Select **Environment** in the navigation tree and ensure that host names are set to be fully qualified.
6. Right-click the entry that you created, and select **Test** to verify it before saving.
  7. Select **Cognos** entry, and edit the **Allow anonymous access?** field, changing it to **False**.
  8. Save the new configuration.

## Results

**Important:** When you configure LDAP, the reporting portlet can no longer be used by users that are not contained in the configured LDAP and do not have the `tcrPortalOperator` role assigned.

## Configuring Cognos-based Tivoli Common Reporting engine with Active Directory

Configure the reporting engine to use the same user repository as the user interface. This procedure is recommended for large user repositories.

### About this task

If you installed Tivoli Common Reporting on a single-computer, no additional configuration is required. However, if you chose distributed installation, you must configure Active Directory on both computers.

**Important:** When you configure the user repository, the reporting portlet can no longer be used by users not contained in the configured user repository.

### Procedure

1. Open the IBM Cognos Configuration by running:
  - **Windows** **Start** → **All Programs** → **Tivoli Common Reporting 3.1** → **IBM Cognos Configuration**
  - **Linux** and **UNIX** `TCR_component_dir/cognos/bin/tcr_cogconfig.sh`
2. In the **Explorer** navigation on the left, go to **Security**, and right-click the **Authentication** section.
3. Select **New resource** → **Namespace....**
  - **Windows** If you are using a Windows operating system:
    - a. Enter a name, select **Active Directory** as the Type, and click **OK**. The new user registry is displayed in the **Explorer** window, under the **Authentication** component.
    - b. Select the entry that you created, go to the **Properties** window and in the **NamespaceID** field, specify a unique identifier for the namespace.

**Tip:** Do not use colons (:) in the Namespace ID property.



- c. Specify the **Host and port**. The host and port values must point to Active Directory Domain Controller host.
- d. Specify the **Binding credentials**.
- Linux UNIX If you are using a non-Windows operating system:
  - a. Enter a name, select **LDAP** as the Type, and click **OK**. The new user registry is displayed in the **Explorer** window, under the **Authentication** component.
  - b. Select the entry that you created, go to the **Properties** window and in the **NamespaceID** field, specify a unique identifier for the namespace.

**Tip:** Do not use colons (:) in the Namespace ID property.

- c. Specify the values for all other required properties to ensure that IBM Cognos components can locate and use your existing authentication provider.

The following settings are examples:

- For **User lookup**, specify (sAMAccountName=\${userID}).
- If you use a single sign-on, set the **Use external identity** value to **True** and specify (sAMAccountName=\${environment("REMOTE\_USER")}) for **External identity mapping**. To remove the domain name from the **REMOTE\_USER** variable, specify (sAMAccountName=\${replace(\${environment("REMOTE\_USER")}, "domain\\", "")}).
- Enter *user@domain* for **Bind user DN and password**.
- Specify objectGUID for **Unique identifier**.
- d. If you want the LDAP authentication provider to bind to the directory server using a specific **Bind user DN and password** when performing searches, then specify these values. If no values are specified, the LDAP authentication provider binds as anonymous.
- e. If you do not use external identity mapping, use bind credentials for searching the LDAP directory server:
  - Ensure that **Use external identity** is set to **False**.
  - Set **Use bind credentials for search** to **True**.
  - Specify the user ID and password for **Bind user DN and password**.
- f. To configure the LDAP advanced mapping properties for use with the Active Directory Server objects, use the values specified in the following table:

Table 3. Values for advanced mapping properties

Mappings	LDAP Property	LDAP Value
Folder	Object class	<i>organizationalUnit, organization, container</i>
	Description	<i>description</i>
	Name	<i>ou, o, cn</i>
Group	Object class	<i>group</i>
	Description	<i>description</i>
	Member	<i>member</i>
	Name	<i>cn</i>

Table 3. Values for advanced mapping properties (continued)

Mappings	LDAP Property	LDAP Value
Account	Object class	<i>user</i>
	Business phone	<i>telephonenumber</i>
	Content locale	Leave this field blank
	Description	<i>description</i>
	Email	<i>email address</i>
	Fax/Phone	<i>facsimiletelephonenumber</i>
	Given name	<i>givenname</i>
	Home phone	<i>hometelephonenumber</i>
	Mobile phone	<i>mobiletelephonenumber</i>
	Name	<i>displayName</i>
	Page phone	<i>pagernumber</i>
	Password	<i>unicodePassword</i>
	Postal address	<i>postaladdress</i>
	Product locale	Leave this field blank
	Surname	<i>surname</i>
	User name	<i>sAMAccountName</i>

These mapping properties represent changes based on a default Active Directory Server installation. If you modified the schema, you might need to make additional mapping changes.

**Note:** LDAP attributes that are mapped to the **Name** property in **Folder mappings**, **Group mappings**, and **Account mappings** must be accessible to all authenticated users. In addition, the **Name** property must not be blank.

- g. From the **File** menu, click **Save**.
4. Go to the **Explorer** window, right-click the new authentication resource under **Authentication**, and click **Test** to test the connection to a new namespace.
5. Select the **Cognos** entry and edit the **Allow anonymous access?** field changing it to **False**.

## Configuring Framework Manager connection

Framework Manager is a separately installable application used to model reports. If you installed it in a location different from the default one, you need to configure it to run with the Cognos-based Tivoli Common Reporting engine and user interface. This step is especially important if you installed Framework Manager on a separate computer.

### Before you begin

Make sure that you extracted and installed the Framework Manager component available from the installation media on the computer where you want to model reports. Before you install Framework Manager, ensure that the **JAVA\_HOME** environment variable is not set. Framework Manager is delivered together with its own version of Java, so if you have **JAVA\_HOME** set to Java version already installed on your computer, Framework Manager configuration might fail to start.

If you installed Framework Manager on a system other than the system where Tivoli Common Reporting engine is installed, the data source must exist on this Framework Manager system and on the Tivoli Common Reporting engine system.

## Procedure

1. Open the Framework Manager configuration program by running *Framework\_Manager\_install\_dir\bin\cogconfigw.exe*

**Tip:** The default Framework Manager installation directory is `c:\%Program Files%\cognos\bin\cogconfigw.exe`

2. In the **Explorer** navigation on the left, go to **Environment** section. **Group Properties** panel opens on the right.
3. Go to **Gateway Settings**, and locate **Gateway URI**. Click the value field, and update it with the URI to your Tivoli Common Reporting server.

**Tip:** The default value for a single-computer installation is `https://localhost:16311/tarf/servlet/component`.

The URIs in Step 3 and Step 4 must match the values in the Tivoli Common Reporting, IBM Cognos Configuration manager. You can check those values by running `tcr_cogconfig.bat` (Windows) or `tcr_cogconfig.sh` (UNIX) on the Tivoli Common Reporting server in the *TCR\_component\_dir\cognos\bin*.

4. In the **Other URI Settings**, edit the value for **Dispatcher URI for external applications** to match the location of your Tivoli Common Reporting engine.

**Tip:** The default value for **Dispatcher URI for external applications** is `http://TCRServerHostname:16310/tarf/servlet/dispatch` for a single-computer installation, and `http://TCRServerHostname:9300/p2pd/servlet/dispatch` for the distributed installation.

5. Save the new configuration.

## What to do next

You can now start modeling your reports with the use of Framework Manager. You will need to log in twice because Framework Manager does not support single sign-on.

---


## Configuring database connection

Configure the connection to a database to access your data. Tivoli Common Reporting supports several database types. The instructions presented in these sections refer to the most commonly used databases.

## Related information

 IBM Cognos Administration and Security Guide 10.1.1 - Data Sources and Connections

 Cognos Business Intelligence 10.1.1 Software Environments - Relational Databases

 Cognos Business Intelligence 10.1.1 Software Environments - Dynamic Query Mode

 Cognos Business Intelligence 10.1.1 Software Environments - ODBC

## Connecting to a DB2 database

Connect Tivoli Common Reporting to a DB2 database.

### Before you begin



 Perform this task with the support of a database administrator.

Make sure that you installed the DB2 database client on the computer where Cognos-based Tivoli Common Reporting engine is installed. You can use either the 32-bit or 64-bit client, however, if you decide to use the 64-bit DB2 client, you must use the 32-bit versions of the library files from the directory `sqlib/lib32`. The version of the client must match the version of your database.

### About this task

To configure the database, connect it to a client, and activate the optional cross-database functionality.

### Procedure

1.   Connect the DB2 database client to the database server by running the **Configuration Assistant** and configuring the local net service name configuration. For other operating systems, see Configuring client-to-server connections in the DB2 information center.

**Important:** Note the name of the connection you have created as it is used in one of the following steps.

Additionally, for non-Windows platforms, the Tivoli Common Reporting must be able to find the local DB2 libraries. To ensure this, check if the DB2 directory containing libraries exists before starting the Tivoli Common Reporting server. Then, configure the system library path to point to the database client library directory by modifying the following environment variable:


-  **LIBPATH**
-  **SHLIB\_PATH**
-   **LD\_LIBRARY\_PATH**

For example, you can modify the `startTCRserver.sh` script by inserting the following line before starting WebSphere Application Server:

```
export LD_LIBRARY_PATH=/opt/ibm/db2/V9.5/lib32:$LD_LIBRARY_PATH
```

For non-Windows systems, you might also need to source the DB2 profile in the Tivoli Common Reporting environment before starting the server, for example `. /home/db2 user/sqlib/db2profile`. You can modify the

startTCRserver.sh script by inserting the following line before starting WebSphere Application Server: `./home/db2 user/sql1lib/db2profile`, where *db2 user* is your local DB2 user ID.

2. Create new database connection for Cognos by following the steps:
  - a. From the **Common Reporting** portlet, go to **Launch** expandable list, and choose the **Administration**.
  - b. On the **Configuration** tab, add a data source by clicking .
  - c. Follow the **New Data Source wizard** as required noting the following steps:
    - On the second panel, choose an DB2 database as **Type**.
    - On the third panel, specify the name of the connection you noted before as the **DB2 database name**, and in the **Signon** section specify a new **User ID** and **Password**.

## Results

You have now connected your Tivoli Common Reporting to a DB2 database instance.

## Connecting to an MS SQL database

Connect the Tivoli Common Reporting to an MS SQL database.

### Before you begin

 Perform this task with the support of a database administrator.

Make sure that you installed an MS SQL database client on the computer where Cognos-based Tivoli Common Reporting engine is installed.


### About this task

To configure the database, connect the database to a client, and activate the optional cross-database functionality.

### Procedure

1. Connect the MS SQL client to the database server by running the **MS SQL Management Studio Express**, configuring the local net service name configuration, and restarting your system.

**Important:** Note the name of the connection you have created as it is used in one of the following steps.

2. Create new database connection for Cognos by following the steps:
  - a. From the **Common Reporting** portlet, go to **Launch** expandable list, and choose the **Administration**.
  - b. On the **Configuration** tab, add a data source by clicking .
  - c. Follow the **New Data Source wizard** as required noting the following steps:
    - On the second panel, choose an Microsoft SQL Server database as **Type**.
    - On the third panel, specify the name of the connection that you noted before as the **Server name**, and in the **Signon** section specify a new **User ID** and **Password**.

## Results

You have now connected your Tivoli Common Reporting to an MS SQL database.

## Connecting to an Oracle database

Connect the Tivoli Common Reporting to an Oracle database.

### Before you begin

 Perform this task with the support of a database administrator.

Make sure that you installed the 32-bit Oracle database client on the computer where Cognos-based Tivoli Common Reporting engine is installed.

**Important:** You might need to export the **TNS\_ADMIN** environment variable before starting the Tivoli Common Reporting server. The **TNS\_ADMIN** variable in the `startTCRserver.sh` script must be set to point to the location of Oracle `tnsnames.ora` file. See the Oracle documentation for details.


### About this task

To configure the database, connect it to a client, configure calculations for Oracle functions, and activate the optional cross-database functionality.

### Procedure

1. Connect the Oracle database client to the database server by running the **Oracle Net Configuration Assistant**, configuring the local net service name configuration, and restarting your system.

**Important:** Note the name of the connection you have created as it is used in one of the following steps.

2. Create new database connection for Cognos by following the steps:
  - a. From the **Common Reporting** portlet, go to **Launch** expandable list, and choose the **Administration**.
  - b. On the **Configuration** tab, add a data source by clicking .
  - c. Follow the **New Data Source wizard** as required noting the following steps:
    - On the second panel, choose an Oracle database as **Type**.
    - On the third panel, specify the name of the connection that you noted before as the **SQL\*Net connect string**, and in the **Signon** section specify a new **User ID** and **Password**.

## Results

You have now connected your Tivoli Common Reporting to an Oracle database.

---

## Setting up the dynamic query mode

Configure JDBC connectivity, create data source connections, and enable Framework Manager models and packages to use the dynamic query mode.

## Before you begin

For a list of databases supported by the dynamic query mode, see Dynamic query mode.

## About this task

The dynamic query mode is an enhanced Java-based query execution mode that optimizes your queries to address their complexity. To find out more about the dynamic query mode, visit IBM Cognos information center.

**Attention:** Existing report packages will not use the dynamic query mode. To use the dynamic query mode, enable the report packages in Framework Manager to allow it. You can also allow the dynamic query mode when publishing from Framework Manager.

## Procedure

1. Configure JDBC connectivity:
  - a. Ensure that JDBC drivers are in the following locations:
    - *TCR\_component\_dir*\cognos\webapps\p2pd\WEB-INF\lib
    - *TIP\_install\_dir*\profiles\TIPProfile\installedApps\TIPCell\IBMCognos.ear\p2pd.war\WEB-INF\lib
  - b. Restart Tivoli Common Reporting.
2. Create a data source connection.
3. Enable Framework Manager models and packages to use the dynamic query mode.




---

## Configuring security permissions

Increase the security settings for the Common Reporting user permissions. By default, all the users created, including the one specified during the installation process, have full administrative privileges. You can modify them in Administration.

## Before you begin

If you installed Tivoli Common Reporting in distributed scenario, by default, anonymous access to the reporting engine is enabled. Before you configure security permissions, you must configure a user repository such as LDAP and disable the anonymous access. To disable the anonymous access, open **Configuration** by running:

-  **Start** → **All Programs** → **Tivoli Common Reporting** → **IBM Cognos Configuration**
-   on the computer with user interface installed:  
*TCR\_component\_dir*/cognos/bin/tcr\_cogconfig.sh, on the computer with the reporting engine installed: *TCR\_component\_dir*/cognos/bin/tcr\_cogconfig.sh

## About this task

To learn more about Tivoli Common Reporting, version 3.1, security settings for authorizations, see “Authentication and authorization in Tivoli Common Reporting” on page 43, and Cognos Administration and Security Guide.



From the Tivoli Integrated Portal level, you can hide the Tivoli Common Reporting portal from certain users or groups by not assigning to them the `tcrPortalOperator` role. If users are assigned to this role, by default inside Cognos, they have full administrative privileges. You can change these settings in Tivoli Common Reporting **Administration**.

All new users created for the Common Reporting portlet are assigned to Everyone user group, which, by default, is a member of the System Administrators role. To increase the security of your reporting solution, edit the members of the System Administrators role.

## Procedure

1. Log on to Tivoli Integrated Portal:
  - a. Go to the following URL: `http://hostname:port/ibm/console`. The default URL is `http://localhost:16310/ibm/console`. Replace *hostname* with the TCP/IP host name of the system where Tivoli Common Reporting is installed, or `localhost` if you are running the web browser on the same system. Replace *port* with the port number that you specified during installation.  
  
**Tip:** On a Windows system where Tivoli Common Reporting is installed locally, you can click **Start** → **Tivoli Common Reporting** → **Launch Reporting Browser** to open the default browser with the correct URL.
  - b. On the Tivoli Integrated Portal login page, log in with a user ID that has access to Tivoli Common Reporting. Access is determined by user roles associated with user IDs. This might be the user ID and password you specified during the installation process, or a user ID and password provided to you by an administrator. The Tivoli Integrated Portal navigation window opens.

**Tip:** Only one logon is required when accessing the reporting interface. The single sign-on option is enabled between the two reporting options.

2. Go to **Reporting** → **Common Reporting**.
3. Open the **Launch** expandable list, and choose **Administration**.
4. On the **Security** tab, go to **Users, Groups, and Roles**, and click the Cognos user namespace.
5. Locate the System Administrators, and set properties for the role by clicking **More** → **Set properties**.

**Tip:** You might need to go to the last page to be able to see the System Administrators role.

6. On the **Members** tab, click **Add** to add an individual administrative user.
7. Add the administrative user of your choice from the `VMMProvider` namespace, and click **OK** to save the settings.

**Tip:** Select to **Show users in the list** to be able to see the users. Beginning with Tivoli Common Reporting 2.1.1, the default is not to return all groups and users that require the administrator to use the search function.

8. Remove the Everyone user group from the System Administrators role by checking the check box, and clicking **Remove**.
9. Click **OK** to save the new settings.



## Authentication and authorization in Tivoli Common Reporting

Security in Tivoli Common Reporting is based on Tivoli Integrated Portal and Cognos. Learn about how they work together and how to authorize specific users or groups to reporting items.

### Authentication

During installation, Tivoli Common Reporting is configured to use the Federated Repository, which is required for authentication to work successfully in Tivoli Common Reporting. You must use the Federated Repository to authenticate users. The authentication mechanism can be the build-in default repository, LDAP, Active Directory, or other repository supported by the WebSphere Federated Repository. For more information about adding a repository, see “Configuring LDAP or Microsoft Active Directory” on page 29.

When installing Tivoli Common Reporting, the Federated Repository is configured to use Internal File Repository. This repository contains users and groups and is built into Tivoli Common Reporting. It does not require the users or groups to exist anywhere outside Tivoli Common Reporting.

Users and groups in the File Repository are managed under the **Users and Groups** navigation item in the console.

After the installation, you can add an LDAP or Active Directory into Tivoli Common Reporting Federated Repository as an additional source. This step is required for distributed installation.

### Authorization

Authorization to common reporting navigation items in the console is controlled with the **tcrPortalOperator** role. You can manage this role by accessing **Users and Groups** → **User Roles** or **Users and Groups** → **Group Roles** in the navigation. Any assignments that you make in this area have no effect on the reporting artifacts.

Authorization to the reporting artifacts is performed completely within the Common Reporting pane. This reporting portlet contains reporting-related roles to which users or groups can be mapped. In this portlet, you can also directly assign access to users and groups.

Additionally, by default, all users are reporting system administrators and have full access. You must remove everyone from the system administrator role to limit authorization access. For more information, see “Configuring security permissions” on page 41.

For more details on authorization, click  to open Help and search the Help for authorization.

## Constraining access to reports

Manage permissions granted to users or user groups for reports and capabilities for reports, report sets, or folders. By default, permissions and capabilities that user groups or reports are assigned are inherited from the parent entry.

## About this task

You can change the default permissions that specific groups or users have to reports or report packages. You can also change capabilities for reports, report sets, and folders.

### Procedure

1. Log on to Tivoli Integrated Portal.
2. Go to **Reporting** → **Common Reporting**.
3. Navigate to the report for which you want to change user permissions and select it.
4. Click **Actions** → **Set properties**.
5. Go to the Permissions tab. The table shows default permissions set for user groups.
6. Select **Override the access permissions acquired from the parent entry** and choose the types of permissions that you want to grant to specific user groups.
7. Go to the Capabilities tab. In the table you can see what capabilities are assigned to reports, report sets or folders.
8. Select **Override the capabilities acquired from the parent entry** to grant and deny capabilities.

### What to do next

To find out more about permissions and capabilities, see IBM Cognos Administration and Security Guide - Permissions and Capabilities.

---

## Configuring Tivoli Integrated Portal portlet functions

You can perform further Tivoli Integrated Portal configuration, such as security or user registry configuration.

### About this task

To access the advanced Tivoli Integrated Portal configuration, read the Tivoli Integrated Portal information center.

---

## Chapter 4. Common Reporting



The Common Reporting component provided by IBM Cognos Business Intelligence Reporting application embedded in Tivoli Integrated Portal interface contains several additional advanced reporting functions.

### Common Reporting functions

See the top tasks you can perform with the embedded Cognos Business Intelligence Reporting application.

- “Emailing reports” on page 56
- “Performing ad hoc reporting” on page 57
- “Web-based report authoring” on page 58

### Using the Common Reporting within the Tivoli Integrated Portal interface

#### Signing in to the interface

You can now use one login and password to access Common Reporting application while keeping the security options. For details, see “Single sign-on (SSO)” on page 7.

#### Viewing the advanced reports in the interface context

Launch the Cognos reports within the context of Tivoli Integrated Portal framework. They can now be displayed with the use of launch in context logic, which generates the appropriate report URLs.

**Tip:** To view reports in PDF or Microsoft Excel format, ensure that you have a PDF or Excel Viewer installed.

#### Mapping the advanced reporting interface to the original Cognos Business Intelligence Reporting application

The original Cognos interface is modified to match the Tivoli Integrated Portal look and feel.

---

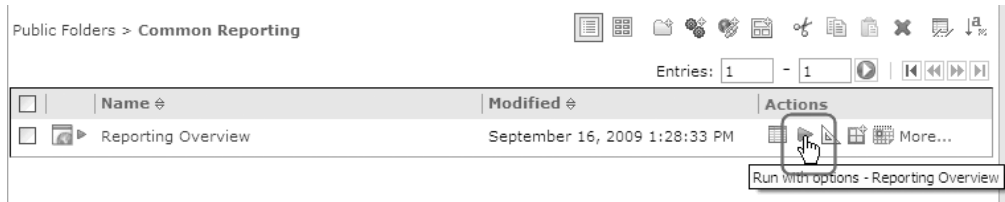
## BIRT reports in Cognos

IBM Cognos supports BIRT reports.

### BIRT reports in Cognos - overview

IBM Tivoli Common Reporting supports BIRT reports known from the previous version.

You can generate BIRT reports in the same way as Cognos reports:



You can identify BIRT reports by the BIRT icon:  .

Import BIRT reports into Cognos with the “trcmd -import” on page 94 command. You can use the report packages created for Tivoli Common Reporting, version 1.1.1, 1.2, and 1.3.

The operations you can perform on BIRT reports are the same as the ones for Cognos reports. You can run, copy, cut, paste, and rename the reports. You can also schedule them and send them via email. You can create report views and save your reports.

**Restriction:** Reports cannot be edited using the Report Studio.

**Important:** IBM Tivoli Common Reporting supports BIRT versions 2.2.1 and 2.2.2 only.

## Running BIRT reports

BIRT reports are generated in the same way as Cognos reports. Run a report and check your infrastructure status.

### Before you begin

You can set file location to save copy of report output to use it again later or for archive purposes. If you decide to use a post-processing script, it must include two parameters:

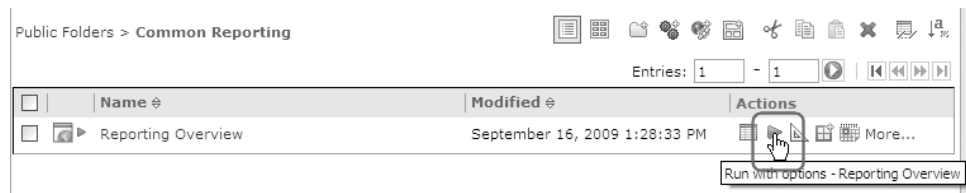
- **Parameter 1** specifies the name of the file that is the report
- **Parameter 2** specifies the name of the file that is the XML descriptor file.

### About this task

**Note:** Drill Through is supported.

### Procedure

1. Log on to Tivoli Common Reporting and select **Reporting** → **Common Reporting**
2. Click the  icon.



3. The options window is displayed. Choose the options you prefer and click **Run**.

4. Set the parameters and click **Finish**. The report is generated. You can now save the report to be able to view it at a later time.

## Saving a BIRT report


You can save a report that you previously generated to instantly view it at a later time with the data from the time of the report creation.

### Before you begin

Generate a report that you want to save.

### About this task

#### Procedure

1. Select **Run**.
2. In the Run with options - Reporting Overview select **Save the report** option.  
The following formats are supported for BIRT reports:
  - HTML
  - PDF
  - DOC
  - XLS
3. Specify the report parameters and click **Finish** to confirm your choice. The report was saved and you can now view it.
4. To view the saved report:
  - a. Select  **View the output versions for this report** icon.
  - b. Choose the version of the report that you want to view and open the report. Report overview opens.

**Note:** You can also save the report by selecting **Keep this version** → **Save report** in the Reporting Overview pane.

## Creating a Report View of a BIRT report

A Report View is a saved version of a report using data from a particular time. The Report View has the same specification as the source report, but has different properties, such as schedules or output formats.

### About this task

To create a Report View:

#### Procedure

1. Log on to Connection.
2. Go to **Reporting** → **Common Reporting**.
3. Locate the report you want to run using the Navigation or Search tab and select the report.
4. Click **Keep this version** and select **Save as a Report View** from the expandable list.
5. Specify the name and the location for the Report View.

## Results

The new Report View is immediately displayed in the table under the source report.

## What to do next

For other ways of creating Report Views, visit IBM Cognos Connection User Guide - Create a Report View.

## Scheduling reports

A report schedule is a schedule for running a report at some time in the future. You can create a schedule to run a report one time or repeatedly.

### About this task

To learn how to schedule reports, go to IBM Cognos Connection User Guide - Schedule Management.

## Importing BIRT reports

Import single reports or report packages from previous versions of Tivoli Common Reporting.

### About this task

You can import reports and report packages only by using the `trcmd -import` command. The package is installed in a directory that you choose within the Cognos Content Manager. For more information and examples, see the `import` command.

## Retrieving the user name from within a BIRT Report

You can retrieve the user name from the context of a BIRT report.

### About this task

Similarly to previous versions, Tivoli Common Reporting 3.1 allows you to retrieve the user name from a BIRT report. Using the following command: `reportContext.getAppContext()`, you can use the application context to obtain the property `com.ibm.tivoli.reporting.api.reportEngine.IUserInfo`, which contains an object that has a method `getUserPrincipal()`. This object returns a `security.Principal` object containing the user name.

**Restriction:** This method works only if information about the current user is available.

### Example

Below you can find a sample code fragment used to retrieve the user name:

```
TCR_IUSER = "com.ibm.tivoli.reporting.api.reportEngine.IUserInfo";
userInfo = reportContext.getAppContext().get(TCR_IUSER);
userName = "unknown";
if (userInfo != null) {
    userName = userInfo.getUserPrincipal();
}
```

## Converting BIRT reports to Cognos reports

Use Conversion Assistant to help you convert your BIRT reports into Cognos. This action is necessary because of the change from BIRT technology to Cognos technology in Tivoli Common Reporting, 3.1.

### Before you begin

Ensure that the report you want to convert is working properly.

**Important:** The BIRT report that you want to convert must be a valid Tivoli Common Reporting BIRT report, otherwise the conversion tool will not work.

### About this task

Conversion Assistant converts a BIRT report output to Cognos report specification. It transfers the report layout, images, and data, however there are certain actions that you must perform manually to finish the conversion. Conversion Assistant facilitates the manual part of the process by placing annotations and tips in the report which instruct you what actions you should take.

To convert your BIRT report into Cognos report:

### Procedure

1. Run the “trcmd -convert” on page 88 command.

**Note:** A report that was recently converted might not run properly. Open it in **Report Studio** and finish the conversion process manually.

2. Create a data source in Cognos. BIRT data sources are incompatible with Cognos data sources. Cognos data source must connect to the same database as BIRT reports. It is recommended for a Cognos data source to have the same name as a BIRT data source.
3. Associate a model provided by Tivoli for the intended product or create a data model in the Framework Manager, add the data source that you created to the data model, and publish it on a server. Then, configure the report using the **Set Properties** icon to be able to use it.
4. Open the converted report in **Report Studio**:
  - a. Log on to the Tivoli Common Reporting interface and go to **Common Reporting**.
  - b. In the **Work with reports** window on the right, choose **Report Studio** from the **Launch** expandable list.
  - c. Open the report that you converted.
5. Complete the report layout with missing elements from the data model:
  - a. **Header** and **Footer** are blank after the conversion. Add any items that you want to be displayed in these sections.
  - b. If you want to display static text, delete the HTML item and replace it with a text item from the toolbox. Do not delete the block item with the text item because it contains the CSS style of the text item.
  - c. If you want to display a script, delete the HTML item and replace it with a text item from the toolbox by changing the **Source Type** from **Text** to **Report Expression** in the properties editor. Then, you can copy and paste your script into the expression editor by double-clicking the item. If you want to display JavaScript, ensure that you placed your script between the following tags: `<SCRIPT TYPE='text/javascript'> </SCRIPT>`.

- d. To display HTML, edit the HTML text within the editor by double-clicking it.
- e. Create a query for each dynamic parameter in your report. During the conversion, a stylized parameter prompt page is created containing all the BIRT parameters grouped by parameter group. The grouping is for aesthetics only. Static parameters are converted completely, dynamic parameters must be linked to a query. Use the parameter query annotation to create a query for each dynamic parameter.

If you want to apply parameters to the data generated for the report, add filters to the appropriate queries.

If your report contains **Report Period** and **Start/End Date** parameters, replace the parameter prompts with the **TCR Date Range Prompt** that you can find in the toolbox. To keep the same style, copy and paste the **Date Filter** into the old **Report Period** prompt cell and the **Date Range** prompt into the old **Start Date** prompt cell. Delete the **End Date** parameter row and follow the instructions for applying the query filter.

- f. If you want to display the parameter values dynamically, change the **Source Type** property of the static text item in the properties from **Text** to **Report Expression**. Double-click the text item and select the Parameters tab in the editor, then drag the appropriate parameter and drop it into the editor.
- g. Organize your data into charts by creating or editing a query that references the data set annotations. To do this, select the Query tab, then drag the data items and drop them into the series, categories, and measures where applicable. Ensure that the **Query** property value matches the name of the query that you want to use. You can use the image beside each chart as a reference. Stylize the chart using the properties editor.
- h. Create tables by creating or editing a query referencing the data set annotations. Select the Query tab in the report editor, then drag the data items into the columns of the Cognos list. Ensure that the **Query** property value matches the name of the query that you want to use. Stylize the chart using the properties editor.
- i. Create heat charts and cross tabs for your report by creating or editing a query referencing the data cube annotations. To do this, select the Query tab in the report editor, then drag the data items into the columns, rows, and corner of the cross tab. Ensure that the **Query** property value matches the name of the query that you want to use.

For heat charts, you must delete the list that was generated during report conversion and add a cross tab item in its place. Note any styles applied to the list so you can add them to the new cross tab.

Add conditional styling to the cross tab by right clicking the cross tab intersection and selecting **Style** → **Conditional styles** to use different styles for different values. Use advanced conditional styling when using expressions to define the styles for each value; otherwise use a regular conditional style.

- j. Create queries for your reports. Charts, tables, and parameters require a query to retrieve and display data. Each chart and table contains an annotation that states which data set it used in the BIRT report. You can find the detailed annotations for each data set at the bottom of the report. These annotations contain the data set SQL query before and after the data set open script was run, and all filters and computer columns.

To create a query go to the Query explorer page and drag a query item from the toolbox into the editor. Double-click a query to edit it and drag data items from the model into the Data Items editor.



To add a filter to a query, go to the Query explorer page and select a query. Select **Data** → **Filters** from the menu or click **Filters**.

- k. If your Tivoli Common Reporting is installed in distributed environment, copy the report images to all computers with user interface installed to the following location: TCR\_install\_dir\profiles\TIPProfile\installedApps\TIPCell\IBM Cognos 10.ear\p2pd.war\tivoli and to all computers with the reporting engine installed to the following location: CR\_install\_dir\cognos\webcontent\tivoli.
6. Test if the converted reports work properly. For more information, see “trcmd -run” on page 99 and “trcmd -distribute” on page 93.

## What to do next

To find out more, go to IBM Cognos Business Intelligence information center.

## Known limitations

This section describes Conversion Assistant limitations caused by technology changes in Tivoli Common Reporting, 3.1

At the present moment, the following limitations are known to exist:

- Because of the incompatibility issues, BIRT data source script and data sources are not transferred to Cognos reports. Additionally, transferring items such as inserting SQL directly into Cognos report would lose the added benefit this technology brings.
- The new Cognos format does not support JavaScript during report generation.
- Web services data sources are not automatically moved from BIRT to Cognos reports.
- Globalization is not supported. The converted report is in the language in which it was generated. However, you can globalize the new report in the Report Studio after the conversion.
- oda data cube is not supported in Cognos reports.

## Setting up JDBC for BIRT reports

Some reports might require that you configure JDBC data sources to provide report data. You can use either of two methods to configure JDBC data sources for these reports.

BIRT and Cognos reports have separate data sources that are created and managed differently.

### Configuring JDBC data sources using JNDI

You can use WebSphere Application Server scripting to configure JDBC providers and data sources for your reports, and to configure JNDI names for reports to use when accessing data sources. If you use this method, the data source properties for reports can access the data source using JNDI without directly specifying the JDBC information.

### Before you begin

Data sources are configured in the embedded WebSphere Application Server environment. To use scripting, you must start the WebSphere wsadmin tool. For more information, see the WebSphere Application Server documentation at [http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/topic/com.ibm.websphere.nd.iseries.doc/info/seriesnd/ae/txml\\_script.html?](http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/topic/com.ibm.websphere.nd.iseries.doc/info/seriesnd/ae/txml_script.html?)

Any JDBC driver properties required by your database vendor must also be set as data source properties in the WebSphere Application Server configuration. For more information, see the WebSphere Application Server documentation and the documentation for your database software.

If you have Tivoli Common Reporting installed in distributed environment, the reporting engine runs on a Tomcat web server. In such case, the JNDI data sources must be configured on that server. For more details, see Tomcat documentation.

### Procedure

1. Configure a JDBC provider.
2. Configure a JDBC data source and its JNDI name.

### Configuring JDBC data sources for direct access

You can configure JDBC drivers for direct access by reports without using JNDI.

### About this task

To set up direct JDBC access:

### Procedure

1. Copy the required JDBC driver files to the following directory:

```
TCR_component_dir\lib  
\birt-runtime-2_2_2\ReportEngine\plugins\  
org.eclipse.birt.report.data.oda.jdbc_2.2.2.r22x_v20071206\drivers
```

(Replace *tcr\_install\_dir* with the name of the Tivoli Common Reporting installation directory.)

2. For a DB2 data source, copy the DB2 JDBC drivers and the license JAR file to the same location. You can copy `db2jcc.jar` and `db2jcc_licence_cu.jar` file on the DB2 server system from location:

```
C:\%Program Files%\IBM\SQLLIB\java
```

or download it from the website.

3. Use the “trcmd -modify” on page 97 command to specify the required JDBC information (including the URL, driver, user ID, and password).

---

## Working with reports



This section contains topics that provide instructions on how to work with reports using IBM Cognos Business Intelligence Reporting.

Use the Common Reporting user interface to navigate the reports.

### About this task

This is a simple reference instruction for creating, publishing, importing, and running your reports.

**Note:** The report server component is provided in both 32-bit and 64-bit versions. The default option is 32-bit. The 64-bit version of report server is for use only with

dynamic query mode reports. If you are using non-dynamic query mode reports, then you must also have a server installed with the report server running in 32-bit mode.

## Procedure

1. Create a data source for your reports with IBM Cognos Framework Manager and publish your report package.

**Note:** Creating data sources and publishing report packages requires report modeling experience. Use IBM Cognos Framework Manager to model reports. This is a separately installed component of Tivoli Common Reporting available from your installation media. For information about how to create data sources and publish packages, see *IBM Cognos Framework Manager User Guide*.

2. Import your report package.
3. Run and distribute your reports.

## Running the sample overview report

After you installed Tivoli Common Reporting 3.1, you can run a check on the reporting functionality by running your first sample report. The report can also be run for an overall reporting overview.

### Before you begin

You can set file location to save copy of report output to use it again later or for archive purposes. If you decide to use a post-processing script, it must include two parameters:

- **Parameter 1** specifies the name of the file that is the report
- **Parameter 2** specifies the name of the file that is the XML descriptor file.

### About this task

**Tip:** To improve the performance when running a report, upgrade your reports. You can upgrade your reports by selecting to **Upgrade all report specifications to the latest version** when importing the reports in the report wizard.

## Procedure

1. Log on to your reporting interface by following the login instructions.
2. Navigate to the **Common Reporting**. A new tab opens on the right.
3. Open the **Common Reporting** package in your **Public Folders** view.
4. Click **Reporting Overview** report to run it.
5. Specify the date parameters to limit the time frame of the report.  
See the description of the parameters.

### Date Range

You can select a date range for your report from the expandable list. You can choose from the following values:

#### All

Select this value to run a report with 1970-01-01 as the start date and the day when you run the report as the end date.

#### Date Range (below)

Select this option to enter the start and end date for the report manually in the fields below the expandable list.

**Today**

Runs a report for data collected today.

**Yesterday**

Select this option to run the report for data collected the day before.

**Last 7 days, Last 30 days, Last 90 days, Last 365 days**

Select one of these options to run the report for data collected during the last 7, 30, 90, or 365 days from the day when you ran the report.

**Current® week**

Runs a report with Monday of the current week as the start date and the day when you run the report as the end date. For example, if you run the report on Wednesday, the date range for the report is Monday to Wednesday.

**Current month**

Runs a report with the first day of the current month as the start date and the day when you run the report as the end date.

**Current year to date**

Runs a report with the first day of the year as the start date and the day when you run the report as the end date.

**Last week, Last month, Last year**

Select one of these values to run a report for last week, month, or year.

**Start Date**

Select this field to choose a specific day from the calendar and hour as the start date for the report. Ensure that you selected **Date Range (below)** from the expandable list for this parameter to work.

**Earliest date**

Runs the report with the earliest date for which data is available as the start date of the report.

**End Date**

Select a specific day and hour as the start date for the report. Ensure that you selected **Date Range (below)** from the expandable list to ensure that this parameter is taken into account when generating the report.

**Latest Date**

Runs the report for the latest date for which data is available as the end date of the report.

**Filters**

Filters allow you to limit the scope of data of the report to a specific package or folder, a specific report, or a report owner. Specify the name of a package, folder, report, or a report owner to which you want to limit the scope of the report. % is the wildcard.

6. Click **Finish**. The report is now generated.

**Sample overview report**

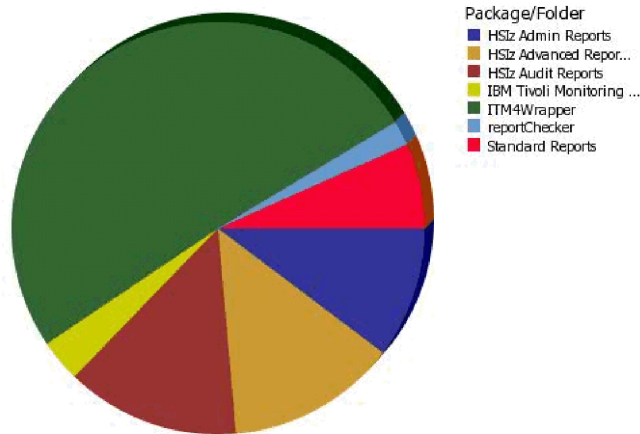
Tivoli Common Reporting comes with a sample report to allow you to monitor your reporting activity.

**Tivoli Common Reporting: Reporting Overview**

The report available from the **Common Reporting** panel shows an inventory of report packages and reports created in the time period specified with date

parameters. The parameters are visible at the top of the report. The pie chart shows the percentage value of reports from one package in the overall number of all the reports and the table below gives the number of reports per given package.

Date Filter All  
 Start Date Jan 1, 1970 12:00:00 AM End Date Jun 30, 2010 11:59:59 PM  
 Package/Folder All Report All  
 Owner All



Reports

Package/Folder	Reports
HSiz Admin Reports	6
HSiz Advanced Reports	8
HSiz Audit Reports	8
IBM Tivoli Monitoring OS Agents Reports	2
ITM4Wrapper	30
reportChecker	1
Standard Reports	4
<b>Summary</b>	<b>59</b>

## Importing Cognos report packages


Import report packages to your workspace using the user interface and start using an existing report model and reports. This importing method can be used for Cognos reports only.

### Before you begin

You must obtain a report package that you want to work with. You can download packages from ISML library, or you can create one using the **Content Administrator** interface. All the packages that you want to import must be stored in the deployment folder in *TCR\_component\_dir\cognos\deployment* for single-computer installation, and *TCR\_install\_dir\cognos\deployment* on the computer with the reporting engine installed for distributed installation.

### Procedure

1. Log on to the Tivoli Common Reporting interface, and go to **Common Reporting**.
2. In the **Work with reports** window, choose the **Administration** from the **Launch** expandable list.
3. Go to **Configuration** tab, and open the **Content Administration** section.


4. Create new package import by clicking  . The **New Import wizard** opens.
5. Follow the wizard to import a new package.

**Tip:** It is recommended that you select to **Upgrade all report specifications to the latest version** when importing your reports. This way you can improve the performance when running a report.

## Exporting Cognos report packages

Export your report package to be able to use it for example, on a different Tivoli Common Reporting instance. You can use this method for Cognos reports only.

### Procedure

1. Log on to the Tivoli Common Reporting user interface, and go to **Common Reporting**.
2. In the **Work with reports** window on the right, choose the **Administration** from the **Launch** expandable list.
3. Go to the **Configuration** tab, and open the **Content Administration** section.
4. Export a new package by clicking  .
5. Follow the wizard to export a package.

## Copying report images to the Tivoli Common Reporting server

Cognos report packages do not contain images. After you imported a Cognos report package, copy the static images to a folder on your computer for the images to be displayed.

### Before you begin

Import a report package.

### About this task

Cognos report packages do not contain images. You must copy the images manually. The image location depends on the installation scenario that you chose.

### Procedure

1. For single-computer installation: Copy the images to the following location:  
*TIP\_install\_dir\profiles\TIPProfile\installedApps\TIPCell\IBM Cognos.ear\p2pd.war\tivoli\*
2. For distributed installation:
  - a. Copy the images to all computers with user interface installed to the following location: *TIP\_install\_dir\profiles\TIPProfile\installedApps\TIPCell\IBM Cognos Servlet Gateway.ear\ServletGateway.war\tivoli*
  - b. Copy the images to all computers with Tivoli Common Reporting engine, to the following location: *TCR\_install\_dir\cognos\webcontent\tivoli*

## Emailing reports

Email your reports to share them with the group of people who do not have access to the reporting portal.

## Before you begin

Set the SMTP information for emailing to work:

1. Open **IBM Cognos Configuration** by:
  - **Windows** Going to **Start** → **All Programs** → **Tivoli Common Reporting 3.1** → **IBM Cognos Configuration**
  - **Linux** and **UNIX** running the following command  
`TCR_component_dir/cognos/bin/tcr_cogconfig.sh` for 32-bit installations, and  
`TCR_component_dir/Cognos/bin64/tcr_cogconfig.sh` for 64-bit installations.
2. Go to **Notification** in the navigation tree on the left and provide the SMTP information such as the mail server, credentials, and default sender.
3. Save the configuration and restart Tivoli Common Reporting:
  - a. Start the server.
  - b. Stop the server.

## Procedure

1. After you ran your report, you can distribute it by clicking **Keep this version**, and choosing **Email report** from the expandable list.
2. Set the email options, and checking off whether you want to include a link to the report or attach it.
3. Click **OK** to distribute the report.

## What to do next

Learn about other ways to distribute reports, by looking at Connection User Guide.

## Scheduling reports

A report schedule is a schedule for running a report at some time in the future. You can create a schedule to run a report one time or repeatedly.

### About this task

To learn how to schedule reports, go to IBM Cognos Connection User Guide - Schedule Management.

## Performing ad hoc reporting

Create reports ad hoc by using simple queries and formatting.

## Before you begin

To perform ad hoc reporting you must have some report packages imported.

## Procedure

1. Log on to the Tivoli Common Reporting interface, and go to **Common Reporting**.
2. In the **Work with reports** window, choose the **Query Studio** from the **Launch** expandable list.
3. Select a package to work with. A **New** window where you can create a report opens.
4. Select and insert items from the navigation tree to complete the report.

**Tip:** Change the appearance of the data by using the menu icons at the top.

5. When the report data and appearance is edited, save the report by specifying a **Name**, and optionally a **Description**, and a **Screen tip**.

## Results

You have created your ad hoc report.

## What to do next

Learn more about authoring the reports in the IBM Cognos Query Studio User Guide.

## Web-based report authoring

Create reports in a Web-based tool that professional report authors use to build sophisticated, multiple-page, multiple-query reports against multiple databases. You can create any reports that your company requires, such as invoices, statements, and weekly sales and inventory reports.

### Procedure

1. Log on to the Tivoli Common Reporting interface, and go to **Reporting** → **Common Reporting**.
2. In the **Work with reports** window, choose the **Report Studio** from the **Launch** expandable list. After you select a report package that you want to use, the **Report Studio** opens.
3. Use the menu controls to create a report or edit existing ones by formatting the layout and manipulating the data in the report.

**Tip:** Use Tivoli Common Reporting template to ensure consistency among your reports.

4. Save your report, and run it anytime you need to present its underlying data.

## What to do next

Learn more about Web-based report authoring in *Report Studio Professional Authoring User Guide* available on clicking **F1** from the **Report Studio**.

## Using Tivoli Common Reporting template

Tivoli Common Reporting report template contains a standard layout pattern that you can use to create your reports. Use the template to ensure consistency among your reports and give them a common look and feel.

### About this task

The Tivoli Common Reporting template contains a prompt page and a proper report page. You can manage the pages in the **Page Explorer** pane on the left side. You can use the prompt page to add filters to your reports. By default, it allows you to specify the date range of the report but you can also customize the filters according to your needs. The proper report page contains an IBM Tivoli header, page number, and date and time when the report was created.

### Procedure

1. Log on to the Tivoli Common Reporting interface.



2. Go to **Reporting** → **Common Reporting** and select **Launch** → **Report Studio**. After you select the package that you want to use, Report Studio opens.
3. Select **Create new** and then **TCR Template**.
4. Customize the parameters to suit your needs. Open the Toolbox by clicking



and drag items onto the report pages.



5. Save your report to be able to run it anytime you need.

## Using parametrized URLs to perform tasks outside Tivoli Common Reporting

Build a parametrized URL to perform various tasks from a web application without opening Tivoli Common Reporting. You can place a customized URL in your web application to create a shortcut to a specific task. Authentication with Tivoli Integrated Portal user name and password is required.

### Before you begin

To build a parametrized URL, you must know what your IBM Cognos Gateway URI is. You can check it in one of the following ways:

- Run IBM Cognos Configuration by going to **Windows** **Start** → **All Programs** → **Tivoli Common Reporting** → **IBM Cognos Configuration** or **Linux** **UNIX** running the `TCR_component_dir/cognos/bin/tcr_cogconfig.sh`. Go to **Local Configuration** → **Environment** → **Gateway Settings** → **Gateway URI**.
- Select a report in Tivoli Common Reporting, and click the **Set properties** icon . The **General** tab opens. Click **View the search path, ID and URL**. The Cognos Gateway URI is the first part of the **Default action URL**, for example `https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component`.
- To perform a task on a specific report with the use of a parametrized URL, check the search path of the report. To do this, select the report, click the **Set properties** icon  and then **View the search path, ID and URL** in the **General** tab. The search path is displayed in the **Search path** field.

### About this task

You can use parametrized URLs to:

- Create a custom start page with links to reports, folders, and other areas
- Provide quick links within an application to launch IBM Cognos studios or reports
- Provide a list of related reports to quickly move between them.

With parametrized URLs, you can perform tasks such as viewing a previously saved report, running a report, or opening Query Studio and Report Studio.

### Procedure

- To view a previously saved report, place the following URL in your application:  
`IBM Cognos Gateway URI?b_action=xts.run&m=portal/launch.xts  
 &ui.tool=CognosViewer&ui.action=view&ui.object=defaultOutput  
 (Report Search Path)`. For example: `https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run  
 &m=portal/launch.xts&ui.tool=CognosViewer&ui.action=view  
 &ui.object=defaultOutput`

(/content/package[@name='IBM Tivoli Monitoring OS Agents Reports']/reportView[@name='Report View of Enterprise Resources List']).

- To run a report without passing in any prompt values, use the following URL: *IBM Cognos Gateway URI?b\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=Report Search Path*. For example: [https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=/content/package\\[@name='IBM Tivoli Monitoring OS Agents Reports'\]/report\[@name='Top Resources Utilization'\]](https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=/content/package\[@name='IBM Tivoli Monitoring OS Agents Reports']/report[@name='Top Resources Utilization'])
- To run a report whose output format is different from the default HTML output format, use the following URL: *IBM Cognos Gateway URI?b\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=Report Search Path&run.outputFormat=desired format*, for example: [https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=/content/package\\[@name='IBM Tivoli Monitoring OS Agents Reports'\]/report\[@name='Top Resources Utilization'\]&run.outputFormat=PDF](https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=/content/package\[@name='IBM Tivoli Monitoring OS Agents Reports']/report[@name='Top Resources Utilization']&run.outputFormat=PDF)

**Note:** Supported output formats are: CSV, HTML, HTMLFragment, MHT, PDF, singleXLS, XHTML, layoutDataXML, spreadsheetML, rawXML, XLWA, and XML.

- To run a report with additional parameters, for each parameter that you want to include, append `&p_parameter name=parameter value` to the URL, for example: [https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=/content/package\\[@name='IBM Tivoli Monitoring OS Agents Reports'\]/report\[@name='Top Resources Utilization'\]&p\\_OS Type=Unix](https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=run&ui.object=/content/package\[@name='IBM Tivoli Monitoring OS Agents Reports']/report[@name='Top Resources Utilization']&p_OS Type=Unix)

**Note:** Passing in prompt values changes the default values displayed on the prompt page. You can suppress the prompt page by appending `&run.prompt=false` to the URL.

- To open Query Studio, use the following URL: *IBM Cognos Gateway URI?b\_action=xts.run&m=portal/launch.xts&ui.tool=QueryStudio&ui.object=/content&ui.action=new*, for example: [https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\\_action=xts.run&m=portal/launch.xts&ui.tool=QueryStudio&ui.object=/content&ui.action=new](https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run&m=portal/launch.xts&ui.tool=QueryStudio&ui.object=/content&ui.action=new)
- To open Query Studio with a specific package, place the following URI in your application: *IBM Cognos Gateway URI?b\_action=xts.run&m=portal/launch.xts&ui.tool=QueryStudio&ui.object=Package Search Path&ui.action=new*
- To open Report Studio, use the following URL: *IBM Cognos Gateway URI?b\_action=xts.run&m=portal/launch.xts&ui.gateway=IBM Cognos Gateway URI&ui.tool=ReportStudio&ui.object=/content&ui.action=new*. For example: [https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\\_action=xts.run&m=portal/launch.xts&ui.gateway=https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component&ui.tool=ReportStudio&ui.object=/content&ui.action=new](https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run&m=portal/launch.xts&ui.gateway=https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component&ui.tool=ReportStudio&ui.object=/content&ui.action=new)
- To open Report Studio with a specific report, place the following URL in your application: *IBM Cognos Gateway URI?b\_action=xts.run&m=portal/launch.xts*

```
&ui.gateway=IBM Cognos Gateway URI&ui.tool=ReportStudio&ui.object=
Report Search Path&ui.action=edit, for example: https://cs-
blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b_action=xts.run
&m=portal/launch.xts&ui.gateway=https://cs-
blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component
&ui.tool=ReportStudio&ui.object=
/content/package\[@name='IBM Tivoli Monitoring OS Agents
Reports']/report[@name='Top Resources Utilization']&ui.action=edit
```

- To open Report Studio with a specific report inside the same web browser or frame, append &launch.openJSStudioInFrame=true, as in the example: https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\_action=xts.run&m=portal/launch.xts&ui.gateway=https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component&ui.tool=ReportStudio&ui.object=/content/package\[@name='IBM Tivoli Monitoring OS Agents Reports']/report[@name='Top Resources Utilization']&ui.action=edit&launch.openJSStudioInFrame=true
- To hide the report viewer header, append &cv.header=false to the URL. For example: https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=view&ui.object=defaultOutput(/content/package[@name='IBM Tivoli Monitoring OS Agents Reports']/reportView[@name='Report View of Enterprise Resources List'])&cv.header=false
- To hide the toolbar at the top of the report, append &cv.toolbar=false to the URL as in the example: https://cs-blade67.tivlab.austin.ibm.com:16311/tarf/servlet/component?b\_action=xts.run&m=portal/launch.xts&ui.tool=CognosViewer&ui.action=view&ui.object=defaultOutput(/content/package[@name='IBM Tivoli Monitoring OS Agents Reports']/reportView[@name='Report View of Enterprise Resources List'])&cv.toolbar=false

## Search path

A search path is a basic expression in IBM Cognos that allows you to find objects. It is one of the parameters that you need for performing operations on reports using commands.

You can use the search path to find one particular object or a set of objects within a folder using an asterisk \* as a wildcard character. If you want to search for a report or a report package whose full name you do not know, you can use the contains function to search for all reports or report packages that contain the specified expression. The basic parameters of a search path are location steps that reflect the structure of catalogs on your computer. Location steps are separated by a slash / and can be followed by one or more predicate. A predicate is an expression that filters an object set. It is enclosed in square brackets: [].

All predicates within a location step must be true for an object to be found. You can use logical or comparison operators and searchable properties as a predicate expression. Use @ to specify the property name.

The following list contains examples and descriptions of search path parameters that you can use to construct your search path:

- ~ Selects the account object associated with the current user.

`~~` Selects the session object associated with the current user.  
`/` Selects the root.  
`/*` Selects the child objects of the root. The asterisk (\*) is a wildcard character.  
**//folder**  
 Selects all folder objects in the content store. When a path starts with two slashes (//), all objects in the content store that fulfill the specified criteria are selected. In this case, the selected objects must be instances of the class folder.  
**//folder | //report**  
 Selects all folder objects and all report objects in the content store. The vertical bar (|) means that the results of two search paths will be combined.  
**//\***  
 Selects all objects in the content store. The asterisk (\*) is a wildcard character.  
**/configuration/\***  
 Selects the configuration object and all its descendants. The two slashes specify all descendant objects of the current object (configuration), and the current object itself. The text between the slashes is called a location step. The asterisk (\*) is a wildcard character.  
**/content//folder/report/ parent::folder**  
 Selects every descendant of the content object that is a folder object and that has at least one child report object. In the `parent::folder` expression, `parent` is an axis and `folder` is a node test.  
**/content/package/folder [@name=' Documentation Report Samples']/\***  
 Selects all child objects in the Documentation Report Samples folder. Expressions enclosed in square brackets are predicates used to filter a set of objects. `/content/package/folder [@name=' Documentation Report Samples']/*` The at sign (@) specifies a property name. The asterisk (\*) is a wildcard character.  
**/content/package/folder/ report[contains (@name, 'Product List')]**  
 Selects all report objects in the path `/content/package/folder` with names that contain the string `Product List`. The predicate `contains` is a call to the function `contains`. The at sign (@) specifies a property name.  
**storeID ("1e08b01ef26b496aac06a14f5ae9a572") /report**  
 Selects all report objects that are descendants of the object that has the `storeID` with the value `"1e08b01ef26b496aac06a14f5ae9a572"`.  
**CAMID(":" )/\*[@routingHints]**  
 Selects all objects in the Cognos namespace where the `routingHints` property is not nil. Expressions enclosed in square brackets are predicates used to filter a set of objects. `CAMID(":" )` specifies the Cognos namespace. The at sign (@) specifies a property name. The asterisk (\*) is a wildcard character.  
**CAMID(":" )/\*[not(@routingHints)]**  
 Selects all objects in the Cognos namespace where the `routingHints` property is nil. Expressions enclosed in square brackets are predicates used to filter a set of objects. `CAMID(":" )` specifies the Cognos namespace. The at sign (@) specifies a property name. The asterisk (\*) is a wildcard character.

## Example

The following search path can be used to find a report named Order Product List Report:

```
/content/package[@name='GO Sales and Retailers']/  
folder[@name='Documentation Reports']/report[@name='Order Product List  
Report']
```

The following search path finds all reports whose name contains the Product List expression:

```
/content/package[@name='GO Sales and Retailers']/  
folder[@name='Documentation Reports']/report[contains(@name, 'Product  
List')]
```


If you replace the report name with a wildcard character, you can use the search path to select all objects in the Documentation Reports folder:

```
/content/package[@name='GO Sales and Retailers']/  
folder[@name='Documentation Reports']/*
```

### Checking the search path of a report

If you do not know the search path of a particular report, you can check it using Cognos Connection.

#### Procedure

1. Log on to Tivoli Common Reporting console.
2. Select the report whose search path you want to check and click the **Set properties** icon . The **General** tab opens.
3. Click **View the search path, ID and URL**. The search path is displayed in the **Search path** field.



---

## Chapter 5. Troubleshooting and support



This section provides information to help you identify and resolve problems that might occur when using Tivoli Common Reporting. Learn how to use log files to determine the problem.

---

### Using log files for troubleshooting

You can troubleshoot problems by enabling the collection of detailed log and trace information also within WebSphere Application Server.

#### About this task

By default, only Cognos 10 Business Intelligence Reporting errors are logged in the logs folder in the Cognos installation directory. To enable more detailed tracing:

#### Procedure

1. Open the PogoLogkitConfig.FullDebug.xml file from the following location:
  - **For the distributed environment** - the machine with the Cognos-based Tivoli Common Reporting engine installed: `<Cognos_install_dir>\webapps\p2pd\WEB-INF`
  - **For the single-computer installation** - `TIP_install_dir\profiles\TIPProfile\installedApps\TIPCell\IBM Cognos.ear\p2pd.war\WEB-INF`
2. Change the name of the file to PogoLogkitConfig.xml, and save it.
3. Restart the Cognos to apply the changes.

### Enabling detailed log and trace information

You can troubleshoot problems by enabling the collection of detailed log and trace information.

#### About this task

To enable detailed tracing:

#### Procedure

1. In the Tivoli Integrated Portal navigation panel, click **Settings** → **WebSphere Administrative Console**.
2. Click the **WebSphere Administrative Console** button and select **Troubleshooting** → **Logs and trace** in the newly open window..
3. In the Logging and Tracing console module, click *serverName* ► **Change Log Detail Levels**. The default server name is server1.
4. Click either the Configuration or Runtime tab:
  - Click the Configuration tab if you want to make persistent changes to the log and trace levels. These changes will take effect after the next server restart.

- Click the Runtime tab if you want to make changes to the log and trace levels for the current session. These changes take effect immediately and do not require a server restart.

If you use the Runtime tab, you can select the **Save runtime changes to configuration as well** check box to make the changes persistent as well as applying to the current session.

5. Expand the list of installed packages and click **com.ibm.tivoli\*** → **com.ibm.tivoli.reporting\***.
6. From an expandable list, select **Message and Trace Levels ► finest** and confirm your choice.
7. If you are making persistent configuration changes, click **Save** when prompted to save the changes to the master configuration.
8. If you changed any settings in the **Configuration** tab, stop and restart the Tivoli Common Reporting server.

## Results

Log and trace files are located in the *TIP\_install\_dir/profiles/TIPProfile/logs/serverName* subdirectory of the Tivoli Common Reporting installation directory. Standard informational log messages are written to the *SystemOut.log* file; detailed trace messages are written to the *trace.log* file.

---

## Troubleshooting the installation

Identify and resolve problems that might occur when you are installing, upgrading or uninstalling the product.

### Installation fails because the Deployment Engine fails to initialize

#### Symptoms

Installation or upgrade fails with the following error: Deployment Engine failed to initialize.

#### Resolving the problem

1. Go to *DE\_install\_dir/logs* and remove all *.lock\_\** files.
2. Ensure that all installer processes are closed. To do this run the following commands:
  - **Linux** **UNIX** `ps -ef | grep java | grep -v grep`
  - **Windows** `tskmgtr`, look for Java processes pointing to the **tmp** parameter and kill the processes.
3. Remove the temporary files from previous unfinished installations.
4. Ensure that the Java process connected with Deployment Engine derby is closed by running the following command:
  - **Linux** **UNIX** `ps -ef | grep derby | grep -v grep`
  - **Windows** `tskmgtr`, and look for Java process with a parameter pointing to the derby database and Deployment Engine installation directory and kill the processes.



## Non-root installation fails

### Symptoms

When running the Tivoli Common Reporting installer on a RedHat Linux operating system, the following link error is reported:

```
java.lang.UnsatisfiedLinkError: java/awt/Component.initIDs()V
at java.awt.Component.<clinit>(Component.java:595)
at java.lang.J9VMInternals.initializeImpl(Native Method)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:192)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:157)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:157)
at com.zerog.ia.installer.util.BidiUtilImpl.setDefaultLocale(DashoA10*..)
at ZeroGay.a(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.j(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.e(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.a(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.a(DashoA10*..)
at com.zerog.ia.installer.Main.main(DashoA10*..)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:64)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
at java.lang.reflect.Method.invoke(Method.java:615)
at com.zerog.lax.LAX.launch(DashoA10*..)
at com.zerog.lax.LAX.main(DashoA10*..)
```

### Causes

The problem is in the InstallAnywhere code that requires extra libraries to be installed into the system.

### Resolving the problem

Run the installer in debug mode to discover what kind of library is missing:

1. Set the installer for DEBUG mode by running the export LAX\_DEBUG=1 command.
2. Run the installer.
3. Collect the output.

Below is an exemplary system output:

```
Exception in thread "main" java.lang.UnsatisfiedLinkError:
/tmp/install.dir.20635/Linux/resource/jre/jre/bin/xawt/libmawt.so
(libXft.so.2: cannot open shared object file: No such file or directory)
at java.lang.ClassLoader.loadLibraryWithPath(ClassLoader.java:957)
at java.lang.System.load(System.java:441)
at java.lang.ClassLoader.loadLibraryWithPath(Native Method)
at java.lang.ClassLoader.loadLibraryWithPath(ClassLoader.java:949)
at java.lang.ClassLoader.loadLibraryWithClassLoader(ClassLoader.java:926)
at java.lang.System.loadLibrary(System.java:453)
at sun.security.action.LoadLibraryAction.run(LoadLibraryAction.java:77)
at java.security.AccessController.doPrivileged(AccessController.java:193)
at sun.awt.NativeLibLoader.loadLibraries(NativeLibLoader.java:75)
at sun.awt.DebugHelper.<clinit>(DebugHelper.java:57)
at java.lang.J9VMInternals.initializeImpl(Native Method)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:192)
at java.awt.Component.<clinit>(Component.java:582)
at java.lang.J9VMInternals.initializeImpl(Native Method)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:192)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:157)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:157)
at com.zerog.ia.installer.util.BidiUtilImpl.setDefaultLocale(DashoA10*..)
at ZeroGay.a(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.j(DashoA10*..)
```

```

at com.zerog.ia.installer.LifeCycleManager.e(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.a(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.a(DashoA10*..)
at com.zerog.ia.installer.Main.main(DashoA10*..)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:64)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
at java.lang.reflect.Method.invoke(Method.java:615)
at com.zerog.lax.LAX.launch(DashoA10*..)
at com.zerog.lax.LAX.main(DashoA10*..)
java.lang.UnsatisfiedLinkError: java/awt/Component.initIDs()V
at java.awt.Component.<clinit>(Component.java:595)
at java.lang.J9VMInternals.initializeImpl(Native Method)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:192)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:157)
at java.lang.J9VMInternals.initialize(J9VMInternals.java:157)
at com.zerog.ia.installer.util.BidiUtilImpl.setDefaultLocale(DashoA10*..)
at ZeroGay.a(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.j(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.e(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.a(DashoA10*..)
at com.zerog.ia.installer.LifeCycleManager.a(DashoA10*..)
at com.zerog.ia.installer.Main.main(DashoA10*..)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:64)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
at java.lang.reflect.Method.invoke(Method.java:615)
at com.zerog.lax.LAX.launch(DashoA10*..)
at com.zerog.lax.LAX.main(DashoA10*..)
Invocation of this Java Application has caused an InvocationTargetException.
This application will now exit. (LAX)

```

In this example, the missing library is the following:

```
libXft.so.2: cannot open shared object file: No such file or directory
```

Install the rpm related to this library.

## Installation using the `install.sh` script fails

### Symptoms

When running the `install.sh` script using the relative path, the installation fails and the following error occurs: Deployment Engine failed to initialize.

### Resolving the problem

Run the installation command again specifying the absolute path to the `install.sh` script.

## Installation fails on a system with Turkish locale

### Symptoms

The installation of Tivoli Common Reporting fails on a system with Turkish locale.

### Resolving the problem

Change your system locale to English for the time of the installation. When the installation has finished, change the locale back to Turkish.

## The Work with reports panel displays an error

### Symptoms

This problem occurs if you have installed Tivoli Common Reporting, logged into the reporting console and then uninstalled Tivoli Common Reporting without logging out of the console. If, after performing these steps, you install Tivoli Common Reporting again and try to open the Work with reports panel, you get the following error: PRS-CSE-1258 Problem encountered during verification of session capability information.

### Resolving the problem

To resolve the problem, restart the web browser or delete the cookie files.

## Cognos Business Intelligence does not install on Linux

### Symptoms

Cognos does not install and the following error appears:

Error while loading shared libraries:  
libXm.so.3: cannot open shared object file: No such file or directory.

### Resolving the problem

Cognos is linked to the openmotif library 2.2.X that contains a symbolic link to libXm.so.3. When libXm.so.3 library is upgraded, the openmotif library is upgraded as well. Newer versions of openmotif do not have the symbolic link to libXm.so.3 but rather to libXm.so.4, while Cognos requires libXm.so.3.

Create a new symbolic link: `ln -s libXm.so.4 libXm.so.3` and return to the installer.

## UDA-SQL-0031 Unable to access database: QE-DEF-0285

### Logon failure

#### Symptoms

Testing a database signon returns an error saying that the password is invalid, despite the fact that the credentials used are correct.

#### Resolving the problem

After you have installed Tivoli Common Reporting and the remote database, add the following lines to the startTCRserver.sh script located in TCR\_component\_dir:

```
#
# Setup Cognos and DB2 Environment
#
LIBPATH=/opt/IBM/tivoli/tipv2Components/TCRComponent/cognos/bin; export LIBPATH
PATH=$PATH:/opt/IBM/tivoli/tipv2Components/TCRComponent/cognos/bin; export PATH

. /home/db2inst1/sql1lib/db2profile
```

## User interface does not work after installing in distributed scenario

### Symptoms

After installing in distributed scenario, Tivoli Common Reporting user interface does not work and the following error displays:

```
Error 500: javax.servlet.ServletException:
CAM-CRP-1114 Unable to find the Certificate Authority self-signed
certificate with alias 'ca' in the keystore
'/opt/IBM/tivoli/tipComponents/TCRComponent/cognos/configuration/signkeypair/jCAkeystore'
```

## Causes

The Tivoli Common Reporting engine is of different bitness than the user interface. All Tivoli Common Reporting components must be installed either in 32-bit mode or 64-bit mode.

## Resolving the problem

Install Tivoli Common Reporting user interface with the same bitness as the reporting engine. For example, if the reporting engine is 32-bit, the user interface must be 32-bit as well.

You can also install the whole infrastructure again with an installer of the same bitness.

## Deployment Engine does not support libstdc++.so.6 on Linux

### Symptoms

When installing on Red Hat Enterprise Linux 5 whose standard C++ library is `/usr/lib/libstdc++.so.6` or higher, the installation process fails with the following error message:

```
ACU0SI0050E External command action failed with return code 1.
Invocation string: [/usr/ibm/common/acsi/bin/wscanhw,
-o,/tmp/collector6121817250515411664.tmp,
-c/usr/ibm/common/acsi/dat/config/scanconfig/xml]
```

## Causes

The problem occurs because `libstdc++.so.6` or higher is not supported and `libstdc++.so.5` is missing from your system.

## Resolving the problem

Install the `compat-libstdc+-33` packages:

- On 32-bit and 64-bit systems, run: `$yum install compat-libstdc++-33.i686`.
- On 64-bit systems, additionally run: `$yum install compat-libstdc++-33.x86_64`.

## Error cannot create ././@LongLink: Permission denied when installing Tivoli Common Reporting

### Symptoms

When installing Tivoli Common Reporting on UNIX operating systems, a tar expansion error may occur.

## Causes

on UNIX platforms, the WebSphere Service Registry and Repository download package must be extracted using the `Gnu tar` command. The standard `tar`

command, for example on AIX, cannot handle long path names in the download package and an error similar to the following is displayed:

```
tar: 0511-188 Cannot create ././@LongLink: The file access permissions do not allow the
specified action.
x JDK/jre.pak/repository/package.java.jre/
java/docs/launchpad/skins/expressLaunchpadModernSkin/images
tar: 0511-169 A directory checksum error on media; -265813056 not equal to 29292.
```

## Resolving the problem

Install the Gnu tar package for your platform. It is available in the optional software supplied together with your UNIX operating systems or you can download it from the Tar download page. **AIX**: You can download the Gnu tar from the IBM AIX Toolbox web site.

Replace /usr/bin/tar with the Gnu tar. After installing the tar package, use the gtar binary file to extract the WebSphere Service Registry and Repository download image.

## Uninstalling the Deployment Engine to complete Tivoli Common Reporting manual uninstallation

Uninstalling the Deployment Engine if there are other products using it is risky and may cause the products to work improperly. To avoid this situation, uninstall the Deployment Engine using Tivoli Common Reporting scripts.

### Symptoms

Manual uninstallation of Tivoli Common Reporting involves removing the Deployment Engine, and therefore cannot be completed if there are other products using the Deployment Engine.

## Resolving the problem

Create the following scripts to uninstall the Deployment Engine:

### Windows

```
@echo off
setlocal

SET TCR_HOME=%1%
SET COMMON_SETENV1="%ProgramFiles%\IBM\Common\acsi\setenv.cmd"
SET COMMON_SETENV2="%ProgramFiles(x86)\IBM\Common\acsi\setenv.cmd"
IF EXIST %COMMON_SETENV1% GOTO COMMONSET1
IF EXIST %COMMON_SETENV2% GOTO COMMONSET2
GOTO EMPTYSET

:COMMONSET1
CALL %COMMON_SETENV1%
GOTO FOUND
:COMMONSET2
CALL %COMMON_SETENV2%

:FOUND
call listIU -v | findstr -v SoftwareIUTypeID | findstr RootIUTypeID |
findstr /i %TCR_HOME% > %TEMP%\tempDE.file
for /F "tokens=4 delims=[,]" %%j
IN (%TEMP%\tempDE.file) do call deleteRootIU %%j %TCR_HOME%
GOTO endlocal
```

```
:EMPTYSET
echo Deployment Engine not installed on the system
exit /b 1

:endlcal
exit /b 0
endlcal
```

Linux

UNIX

```
#!/bin/sh

TCR_HOME=$1
arch=`uname -s`
if [ `echo $arch | grep SunOS` ]; then
    USERNAME=`/usr/ucb/whoami`
else
    USERNAME=`whoami`
if
setenvcmd="$HOME/.acsi_$USERNAME/setenv.sh"

# First look in the users location
if [ -f $setenvcmd ]; then
    . "$setenvcmd"
else
    # Then try the common location
    setenvcmd='/var/ibm/common/acsi/setenv.sh'
    export setenvcmd
    if [ -f $setenvcmd ]; then
        . "$setenvcmd"
    else
        echo 'Deployment Engine not installed on the system'
        exit 3
    if
if

tmpTCRfile="/tmp/$$.out"
listIU.sh -v | grep TCR | grep -v SoftwareIUTypeID | grep RootIUTypeID | grep $TCR_HOME
| awk -F[ '{print $3}' | awk -F, '{print $1}' > $tmpTCRfile

while read line
do
    deleteRootIU.sh $line $TCR_HOME
done<$tmpTCRfile

rm $tmpTCRfile
echo 'Operation completed successfully'
exit 0
```

Run the script twice, for the first time specifying *TCR\_install\_dir* as path, and for the second time specifying *TCR\_component\_dir* as path.

## Installation on Solaris fails

### Symptoms

When installing Tivoli Common Reporting on Solaris operating system, the installation fails because of too low physical memory or not enough swap space. The following error is displayed:

```
Execute failed: java.io.IOException:
Cannot run program "chmod" (in directory "/opt/IBM/tivoli/tipv2/profileTemplates/default/actions"):
error=12, Not enough space
```

## Resolving the problem

Add swap space:

1. Run the following command: `mkfile 3072m /var/newswap` to create a 3 GB file which will be used as swap.
2. Add the swap by running the `swap -a /var/newswap` command.
3. Clean the environment and run the Tivoli Common Reporting installer again.

## During Cognos Mobile installation, the installation script fails with an exception

### Symptoms

When installing Cognos Mobile, the script fails with the following exception:

```
Exception in thread "main" java.lang.NoClassDefFoundError: org.apache.tools.ant.  
Main  
Caused by: java.lang.ClassNotFoundException: org.apache.tools.ant.Main  
    at java.net.URLClassLoader.findClass(URLClassLoader.java:434)  
    at java.lang.ClassLoader.loadClass(ClassLoader.java:653)  
    at sun.misc.Launcher$AppClassLoader.loadClass(Launcher.java:358)  
    at java.lang.ClassLoader.loadClass(ClassLoader.java:619)  
Could not find the main class: org.apache.tools.ant.Main. Program will exit.
```

### Causes

The mobile installation scripts use ANT libraries from the Deployment Engine libraries location. The `installMobile.bat` script uses the libraries located in `ANT_LIB=C:\Progra~1\IBM\common\asci\lib`, and the `installMobile.sh` script uses libraries from `ANT_LIB=/usr/ibm/common/acsi/lib`. These scripts will not run if Deployment Engine has been removed from the system.

## Resolving the problem

If you have removed Deployment Engine from your system, download and install any ANT 1.7.1 or later and point to its libraries from the mobile installation scripts.

---

## Troubleshooting Common Reporting

Identify and resolve problems that might occur when you are using the product. This section contains problems that might occur when working with your reports, as well as Cognos-related problems.

## Browsing images does not work in Report Studio

### Symptoms

When adding image to a report in Report Studio, you cannot browse images. The image directory is displayed as empty.

### Causes

WebSphere Application Server does not support WebDav.

## Resolving the problem

Type the image URL as a relative path. For example: `../tivoli/tcr_common/images/tivoli.gif`

## Your login session expires while working with the Common Reporting portlet

### Symptoms

While working with Common Reporting portlet, your session expires and a Cognos authentication window appears asking you to provide your user name and password.

### Resolving the problem

Click **Cancel**, return to Tivoli Integrated Portal login screen, provide your credentials, and open the Common Reporting portlet again.

## ODBC System DSN connections fail to test from the Tivoli Common Reporting server

### Symptoms

On 64-bit Windows operating systems, ODBC System DSN connections test successfully from the Windows ODBC utility, but fail to test successfully from the Tivoli Common Reporting server when creating a data source. The following error message is displayed: UDA-SQL-0532 Data Source is not accessible.

### Causes

64-bit Windows contains both a 32 and 64-bit version of the ODBC utility:

- The 32-bit version of the Odbcad32.exe file located in the *system\_drive*\Windows\SysWow32 folder.
- The 64-bit version of the Odbcad32.exe file located in the *system\_drive*\Windows\SysWow64 folder.

64-bit applications only see the data sources defined from the 64-bit Windows ODBC utility. The same happens for 32-bit. The ODBC utility launched from **Administrative Tools** is the 64-bit version. Tivoli Common Reporting is a 32-bit application so it does not see the 64-bit ODBC data sources.

### Resolving the problem

Use the 32-bit version of the Windows ODBC utility to define the data sources. The 32-bit version of the Odbcad32.exe file is located in the *system\_drive*\Windows\SysWow32 folder.

For more information, see <http://support.microsoft.com/kb/942976>

## When starting Framework Manager you are prompted to supply your login details twice

### Symptoms

When you initiate Framework Manager, you are required to provide your login credentials. When you have done that, a Framework Manager login panel is displayed with the following text: Provide valid credentials. The user or password your provided is not valid.

### Causes



Framework Manager requires you to login twice because it does not support single sign-on.

## Resolving the problem

Ignore the message about invalid user or password and provide your login credentials again.

## Drill-through definitions in BIRT reports do not work

### Symptoms

From time to time, drill-throughs in BIRT might not be working.

### Resolving the problem

Restart the Tivoli Common Reporting server:

1. Stop the server by navigating to the following directory in the command-line interface:
  - **Windows** `TCR_component_dir\bin`, and running the `stopTCRserver.bat` command.
  - **UNIX** **Linux** `TCR_component_dir/bin`, and running the `stopTCRserver.sh`
2. Start the server from the command-line interface by navigating to:
  - **Windows** `TCR_component_dir\bin`, and running the `startTCRserver.bat` command.
  - **UNIX** **Linux** `TCR_component_dir/bin`, and running the `startTCRserver.sh`

## The Work with reports window is blank

### Symptoms

After restarting Tivoli Integrated Portal server and navigating to **Common Reporting**, the **Work with reports** window on the right is blank.

### Causes

This happens because when Tivoli Integrated Portal server is starting, all the applications installed in embedded WebSphere Application Server start as well, which takes some time.

### Resolving the problem

Wait for all the applications to load.

## An error UDA-SQL-0569 appears while starting Cognos server

### Symptoms

When starting Cognos server, the error: UDA-SQL-0569 - Unable to load the driver manager library (db2cli.dll) occurs. The server does not start.

### Causes

Cygwin is installed on Windows Server and the bin directory is added to the *PATH* variable.

## Diagnosing the problem

You can find the error in the log file or directly in the details of Cognos startup dialog, which is displayed by the Configuration tool (cogconfigw).

## Resolving the problem

Remove the Cygwin/bin entry from your system *PATH* and restart the system.

## An error occurs when starting Framework Manager

### Symptoms

An error BME-EX-0047 Unable to read preferences for the requested.. appears when opening or creating a project in Framework Manager and Framework Manager no longer works properly.

### Resolving the problem

Overwrite the bmt.ini file that you can find in the configuration directory. You can find a working copy of this file on other computer or from the backup.

## Logon fails in Turkish locale

### Symptoms

When installing Tivoli Common Reporting on an unsupported locale, errors related to database connection may appear.

### Causes

This problem occurs if you have the following configuration:

- You have DB2 installed, and when testing the connection from DB2 client, the connection test succeeds.
- You have created a native connection to Cognos Business Intelligence.
- The locale settings for your server machine is Turkish. You can verify this from shell by typing: `enx | grep LANG`. The system output for Turkish is:  
`LANG=tr_TR.UTF-8.`
- When testing the connection to Cognos, you get the error:  
UDA-SQL-0031 Unable to access the "testDataSourceConnection" database.  
UDA-SQL-0040 A syntax error was detected while parsing "{0}" in the file "{1}"  
UDA-SQL-0038 S syntax error was detected while parsing the line number "574" near  
"insert" in the file "opt/IBM/tivoli/TIP21Components/TCRComponent/Cognos/c8/./bin/./  
cogdmd2.ini

In this case, Cognos uses a meta SQL code, independent from the vendor, and the problem is in the conversion process from Cognos SQL to native SQL. At line 574 of the cogdmd2.ini file that maps each Cognos SQL command to native DB2 SQL the statement:

```
Insert="insert"
```

is wrongly translated because of the `toLowerCase()` and `toUpperCase()` functions of `String` class for the letters `I` and `i` that in Turkish have special meaning.

## Resolving the problem

Change the environment language to en\_US.UTF-8.

## Error QE-DEF-0368: Unable to decrypt user name and password credentials from the content store

### Symptoms

User name and password cannot be decrypted from the Cognos Content Store. If you point Framework Manager to a new Tivoli Common Reporting installation, you may get the following error: QE-DEF-0368 Unable to decrypt user name and password credentials from the content store

### Causes

This happens when old credential keys are cached in Framework Manager

### Resolving the problem

1. Close Framework Manager together with its configuration user interface.
2. Navigate to the *FM\_install\_dir*\Configuration directory.
3. Back up the following directories: csk, encryptkeypair, signkeypair and delete them.
4. Open **Configuration**, click **Save**, and **Apply**.

## Unable to locate libcoguardor on Linux with Oracle

### Symptoms

If you are using Cognos on Linux with Oracle data source, and you try to test the Cognos connection from the user interface, you may get an error that Cognos is unable to locate the **libcoguardor** gateway.

### Resolving the problem

Cognos does not support 64-bit systems so if you are using a 64-bit system, and the Oracle client is a 64-bit version, install a 32-bit version of the Oracle client and see the following instructions to configure it Cognos Oracle connection problems.

#### Fast path:

1. Install 32-bit Oracle client.
2. Restart your computer.
3. Set the variable **COGNOS\_HOME** to point to the base directory of the Oracle client installation.
4. Configure the system library path to point to the Oracle client libraries (32-bit version). You must modify the following variables:

- **Solaris** **LD\_LIBRARY\_PATH**
- **Linux** **LD\_LIBRARY\_PATH**
- **HP-UX** **SHLIB\_PATH**
- **AIX** **LIBPATH**
- **Windows** **PATH**

## Oracle environment variables for non-Oracle default user

### Symptoms

The variables **ORACLE\_HOME** and **LD\_LIBRARY\_PATH** necessary to correctly connect to an Oracle data source are set automatically by the `/etc/profile.d/oracle.sh` script. This happens only for an Oracle user.

### Resolving the problem

If you are using non-Oracle user, set the **ORACLE\_HOME** and **LD\_LIBRARY\_PATH** manually or modify the `oracle.sh` script to set them for all users.

## The Common Reporting portlet does not work properly in Internet Explorer 8

### Symptoms

When opening Tivoli Common Reporting in Internet Explorer 8, the **Common Reporting** portlet does not display properly. Some of the windows do not open or are not editable.

### Causes

This problem occurs if you access Tivoli Common Reporting from the Local intranet zone of Internet Explorer and the security settings for Local intranet and Internet zones differ.

### Resolving the problem

Change Internet Explorer security configuration:

1. In the Internet Explorer 8 window, go to **Tools** → **Internet Options** and select the **Security** tab.
2. Select the **Local intranet** zone and change the security level for this zone to **Medium-high**.
3. Click **Sites**, then **Advanced** and add the Tivoli Integrated Portal site.
4. Select the **Internet** zone and change the security level for this zone to **High**.
5. On the same tab, click **Custom level**, find **Scripting** → **Active scripting** in the tree, and select **Enable**.
6. Save your settings.

## No content displayed in Common Reporting portlet in Internet Explorer 7

### Symptoms

The Common Reporting portlet is blank when opened in Internet Explorer 7 with default security settings.

### Resolving the problem

Customize the browser security settings to match the portlet demands.

To change the settings:

- In Internet Explorer 7 window, go to **Tools** → **Internet Options**, and on the **Security** tab in the **Security level for this zone** section, click **Custom level...**
- On the list, find the **Miscellaneous** category, and disable the **Access data sources across domains** option.
- Click **OK** to apply the changes.

## Charts in reports do not appear

### Symptoms

When rendering a report, charts do not appear and an error appears in the log files. The log file is in the directory *TCR\_install\_dir/profiles/TIPProfile/logs* in the form *YYYY MM DD hh mm ss.log*, where *YYYY* is the year, *MM* is the month, *DD* is the day, *hh* is the hour, *mm* is the minute, and *ss* is the second. The file reports the following error: May 19, 2010 2:09:43 PM

```
org.eclipse.birt.chart.exception.ChartException logThis WARNING: Exception
org.eclipse.birt.chart.exception.ChartException: CREATE_EXTENSION_FAIL at
org.eclipse.birt.chart.util.PluginSettings.getPluginXmlObject(PluginSettings.java:987)
at org.eclipse.birt.chart.util.PluginSettings.getDisplayServer
(PluginSettings.java:545)at
org.eclipse.birt.chart.device.swing.SwingRendererImpl.init
(SwingRendererImpl.java:130)at
org.eclipse.birt.chart.device.swing.SwingRendererImpl.<init>
(SwingRendererImpl.java:122)at
org.eclipse.birt.chart.device.image.JavaxImageIOWriter.<init>
(javaxImageIOWriter.java:123)at
org.eclipse.birt.chart.device.image.PngRendererImpl.<init>
(PngRendererImpl.java:18).
```

The error appears on UNIX operating system.

### Causes

BIRT requires a graphical user interface API to render charts. This error appears only on UNIX-like systems, where a graphical user interface is an optional component. It does not appear on Windows, where the Win32 API always contains the graphical user interface API.

### Resolving the problem

Install the X system. Below is a list of packages that help for SUSE Linux (for other distributions, similar packages are available:

```
Linux SLES (9.156.46.78) [10:44] root /usr/lib # rpm -qa | grep xorg
```

- xorg-x11-server-6.9.0-50.58
- xorg-x11-fonts-75dpi-6.9.0-50.58
- xorg-x11-6.9.0-50.58
- xorg-x11-fonts-100dpi-6.9.0-50.58
- xorg-x11-Xvnc-6.9.0-50.58
- xorg-x11-driver-video-radeon-6.6.3-0.19
- xorg-x11-server-glx-6.9.0-50.58
- xorg-x11-libs-6.9.0-50.58
- xorg-x11-driver-video-nvidia-6.9.0-46.51

- xorg-x11-fonts-scalable-6.9.0-50.58
- xorg-x11-libs-32bit-6.9.0-50.58
- xorg-x11-Xnest-6.9.0-50.58
- xorg-x11-driver-video-6.9.0-46.51

## Cognos Configuration does not open

### Symptoms

Launching Cognos Configuration fails.

### Causes

This happens when the **JAVA\_HOME** environment variable points to a different Java than the Cognos Java.

### Resolving the problem

To resolve the problem, you can:

- Follow the steps in IBM Cognos information center to update your Java environment.
- Open the IBM Cognos Configuration by running:
  - **Windows** `TCR_component_dir\cognos\bin\tcr_cogconfig.bat`
  - **Linux** **UNIX** `TCR_component_dir/cognos/bin/tcr_cogconfig.sh`

The script sets the correct Java.

## Cannot open the sample overview report

### Symptoms

After installing Tivoli Common Reporting, when opening the sample overview report, an error message appears and the report does not open.

### Resolving the problem

To resolve the problem:

1. Locate the file `\WEB-INF\services\reportservice.xml`.
2. In the file, locate the section that refers to **async\_wait\_timeout\_ms**.
3. Modify the setting to increase the timeout from the default (30 seconds) to a larger setting, for example 90 seconds (90000 ms).
4. Save the file.
5. Restart the IBM Cognos service.

## Error after running a sample overview report

### Symptoms

After running a sample overview report, an error with the ID UDA-SQL-0114 is displayed.

### Causes

This error is caused by a memory issue.

## Resolving the problem

See the IBM web page for most common solutions to this problem.

## When trying to find users in user repository, an error appears

### Symptoms

If you have configured a large user repository, and then you are trying to find users in this user repository, a `NullPointerException` appears as a result.

## Resolving the problem

To resolve the problem:

1. In the Tivoli Integrated Portal console, select **Launch** → **Cognos Administration** → **Configuration** → **Dispatchers and Services**.
2. Click the link to the dispatcher.
3. Click **Set Properties to the Content Manger Service**.
4. Select **Settings**.
5. In **Advanced Settings**, select **Edit to Environment**.
6. Enter `CM.CMREQUEST_PERFALARM_THRESHOLD` as the parameter.
7. Enter 3600000 as the value. 3600000 is an hour, you can increase this value if necessary.
8. Confirm your settings and restart the service.

## Connection with the datasource fails

### Symptoms

When testing the connection with the datasource, the DPR-ERR-2002 error message is displayed. The connection with the data source cannot be established.

## Resolving the problem

Remove the `hard_drive\work\tools\windk\bin` directory from the **PATH** environment variable.

## Cannot save IBM Cognos Configuration settings

### Symptoms

When trying to save IBM Cognos Configuration settings, the following error message appears: The cryptographic information cannot be encrypted. Do you want to save the configuration in plain text?.

## Resolving the problem

Go to the **Environment** section and specify `http://localhost:16315/tarf/servlet/dispatch` for the **Gateway URI** and **Dispatcher URI** for external applications.

## The reporting engine fails to start with the SQLCODE=286 and SQLSTATE=42727

### Symptoms

After you have installed Tivoli Common Reporting and configured it to use DB2 as the content store database, the reporting engine does not start with SQLCODE=286 and SQLSTATE=42727.

## Causes

The DB2 user that was used for connecting to DB2 and creating all the databases is the only user that can access this table space. An error occurs when a different user is used to connect to DB2.

## Resolving the problem

Use the DB2 user name and password that you previously used to create the database. If you do not know this user name or password:

1. Run the following command to check if the user has access to the temporary user table space:

```
db2 connect to database_name user_id using password
db2 declare global temporary table t1 (c1 char(1))
with replace on commit preserver rows not logged
db2 disconnect database_name
```

If this command fails, it means that the user cannot access the temporary user table space in the database. In such case, move on to Step 2.

2. Run the following command to create a new temporary table space for the user:

```
db2 connect to database_name user_id using password
db2 create user temporary tablespace usertmp2 managed by system using ('usertmp2')
db2 disconnect database_name
```

For more information, consult DB2 information center.

## Report Studio does not work with Internet Explorer 8

### Symptoms

When trying to open Cognos 8.4.1 reports in Internet Explorer 8, the following error message appears:

CM-REQ-4158 The search path "/content/folder[@na#e='folder']/report[@name='report'] is invalid

### Causes

The Internet Explorer 8 XSS filter scrambles the Cognos search path rendering it invalid.

### Environment

All Windows operating systems.

## Resolving the problem

Apply the following changes to Internet Explorer 8:

1. Add Cognos URL to Trusted Sites list.
2. Modify the options of the Trusted Sites zone and set the "Enable XSS Filter" property to "Disable".
3. Restart the web browser.



**Note:** Turning off the browser's XSS filter has little or no risk when done only on the Trusted Sites zone. The IBM Cognos BI application has an internal firewall which protects it from XSS attacks, so the browser's filter is redundant.

## Reports do not run with SELinux Security enabled

### Symptoms

On Red Hat Enterprise Linux, reports do not run when SELinux Security is enabled. When running a report, the following error is displayed:

DPR-ERR-2056: The Report Server is not responding

You can view the details of the error in the *TCR\_Component\_dir/Cogserver.log* file:  
./mfplibxparser.so: cannot restore segment prot after reloc: Permission denied

### Resolving the problem

On Red Hat Enterprise Linux operating systems, SELinux is an extra layer of security which blocks many ports causing problems in server communication. Disable the SELinux security setting the **SELINUX** parameter in */etc/selinux/config* to SELINUX=disabled.

## BIRT drill-through definitions do not work in Cognos

### Symptoms

When importing BIRT reports with drill-through definitions referencing a report located in another directory to Cognos, the import operation is successful but the drill-through definitions do not work

### Resolving the problem

In a drill-through definition, when referencing a report from another folder, the definition includes the folder name, as in the following example:

```
<report_dir>/target_BIRT_report.rptdesign
```

Modify the definition by removing the *<report\_dir>* so that it points directly to the referenced report, such as *target\_BIRT\_report.rptdesign*. For example, if your definition contained the following path:

```
<data id='10004222">
<property name="resultSetColumn">MODIFIEDDATE</property>
<structure name="action">
<property name="linkType">drill-through</property>
<property name="reportName">Device Configuration/itncm_device_config.rptdesign</property>
<property name="targetWindow">_blank</property>
<property name="targetFileType">report-design</property>
<list-property name="paramBindings">
```

remove the Device Configuration folder to obtain:

```
<data id='10004222">
<property name="resultSetColumn">MODIFIEDDATE</property>
<structure name="action">
<property name="linkType">drill-through</property>
<property name="reportName">itncm_device_config.rptdesign</property>
<property name="targetWindow">_blank</property>
<property name="targetFileType">report-design</property>
<list-property name="paramBindings">
```

## Scheduled reports do not run after changing user password

### Symptoms

After changing user password for Tivoli Integrated Portal, reports scheduled for that user do not work unless run manually.

### Causes

There are two permission systems - Tivoli Integrated Portal and Tivoli Common Reporting. When you change your user password in one of them, you must refresh the settings in the other one as well.

### Resolving the problem

Change your user password for Tivoli Common Reporting:

1. Log in to Tivoli Integrated Portal with the user whose password changed.
2. Go to Tivoli Common Reporting.
3. Select **My Area** → **Preferences** and then go to the **Personal** tab.
4. Scroll down to the **Credential** section and click the **Renew the credentials** link.
5. Provide the new password.

---

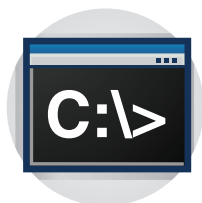
## Chapter 6. Reference



Reference information supports the tasks that you want to complete. It includes system messages.

---

### Commands



This section contains topics that provide information about command-line interface in IBM Tivoli Common Reporting .

The **trcmd** command provides access to the Tivoli Common Reporting command-line interface. Use this command to perform administrative tasks related to reports, report sets, and report designs.

The command-line interface is available only on the system where Tivoli Common Reporting is installed. To use the **trcmd** command, go to the `tipv2Components/TCRComponent/bin` subdirectory of the Tivoli Integrated Portal installation directory.

Each command function is accessed using a command flag, which must be the first command-line argument following **trcmd** (**trcmd.sh** on Linux and UNIX systems). Each command flag might have multiple flag sets; a flag set is a set of command-line arguments used together to perform a specific task. For example, different flag sets for **trcmd -import** are used to import reports.

To see syntax and usage information for any **trcmd** command flag, use the **-help** flag. For example, to see information about the **-list** command flag, use this command:

```
trcmd -list -help
```

The command reference topics in this section use special characters to define command syntax:

[ ]	Identifies an optional argument. Arguments not enclosed in brackets are required.
...	Indicates that you can specify multiple values for an argument.
	Indicates mutually exclusive arguments. Specify either the argument to the left of the separator or the argument to the right of the separator, but not both.
{ }	Encloses a set of mutually exclusive arguments separated by  .

**Tip:** The documentation in this section shows the command usage for a Windows system. On a Linux or UNIX system, use **trcmd.sh**.

## Command-line authentication

You must supply a valid user ID and password to use the Tivoli Common Reporting command-line interface.

For some operations, your user ID must have sufficient permissions to access the specified objects; for example, you might need access to a particular report or report set. For more information about authorization, see Constraining access to BIRT reports.

You can specify the user ID and password in the following way:

On the command line, use the **-user** *userID* **-password** *password* arguments, as in the following example:

```
trcmd -list -reports -user tipAdmin -password adminPassword
```

For distributed installation with LDAP configured you must use the **-namespace** parameter, which is optional for other installation scenarios. If you do not provide it, default value will be used. Its default value depends on the installation scenario that you chose. For installation on a single computer, it is *VMMProvider*, and for distributed installation, it is *LDAP*.

## trcmd -access

The **-access** command flag for the **trcmd** command grants, removes or denies access for a particular user, group, or role to access a specified resource.

### Syntax

Use this syntax to change access to a resource:

```
trcmd -access {-grant | -remove | -deny} -permissions permission1 permission 2..  
{-entity cognosSearchPath | -reportSet cognosSearchPath} {-accessIdentity  
cognosSearchPath | -accessUser cognosSearchPath | -accessGroup  
cognosSearchPath][-help]
```

Use this syntax to cause a resource to inherit all its permissions from a parent object:

```
trcmd -access -inheritPermissions -entity cognosSearchPath
```

### Note:

1. Authentication with **-user** *userID* and **-password** *password* is required in all cases.
2. If you have installed Tivoli Common Reporting in distributed installation, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, the **-namespace** parameter points to VMMProvider.

## Parameters

**-accessIdentity** *identityName*

The name of entity for which authorization is to be changed. It can be a user, group, or role.

**-accessGroup** *groupName*

The function of this flag is identical to the **-accessIdentity** flag. Its presence ensures compatibility with earlier versions of Tivoli Common Reporting.

**-accessUser** *userName*

The function of this flag is identical to the **-accessIdentity** flag. Its presence ensures compatibility with earlier versions of Tivoli Common Reporting.

**-deny**

Prevents a user or group from accessing the specified resource. If a user belongs to more than one group, and any of these groups has been denied access to a resource, the user will not be able to access this resource.

**-entity** *cognosSearchPath*

Specifies the Cognos search path to a resource.

**-grant**

Adds an authorization permission for the specified user, role, or group to access the specified resources. If a user has multiple roles and belongs to multiple groups, it is enough to grant permission to any of these objects.

**-help**

Displays syntax and usage information of a command flag.

**-permissions** *permission1 permission 2..*

Specifies the type of permission that you want to grant to a user or group. You can grant multiple permissions at the same time. They must be separated by space. Possible values are:

- **read**
- **write**
- **execute**
- **setPolicy**
- **traverse**

**-remove**

Removes **deny** on a permission, as well as an authorization role for the specified user or group to access the specified resources. However, if a user belongs to more than one group, and any of these groups has access to a specified resource, the user will still be able to access this resource.

## Examples

- This example grants user CAMID('VMMPProvider:tester') setPolicy and write permissions to the object /content/package[@name='Common Reporting']/report[@name='Reporting Overview']:

```
trcmd.bat -user tipadmin -password tipadmin -access -grant
-permissions write setPolicy
-entity "/content/package[@name='Common Reporting']/
report[@name='Reporting Overview']"
-accessIdentity "CAMID('VMMPProvider:tester')"
```

- This example lists authorizations that the user tipadmin has to the object /content/package[@name='Package1']:

```
trcmd.bat -list -authorizations -entity "/content/package[@name='Package1']"
-user tipadmin -password tipadmin
```

## trcmd -checkstatus

Use the **-checkstatus** command flag for the **trcmd** command to check the status of a specific Tivoli Common Reporting component.

## Syntax

Use this syntax to check the status of a component:

**trcmd -checkstatus-reportingEngine** [**minutesToWait** *minutes*]

### Note:

1. If you have installed Tivoli Common Reporting in distributed installation, you must use the **-namespace** parameter.
2. If you have configured more than one user repository, specify **-namespace** value. By default, **-namespace** points to VMMPProvider.

## Arguments

### **-reportingEngine**

Checks the status of the reporting engine.

### **-minutesToWait** *minutes*

Specifies the maximum component response time in minutes. **0** is the default value used if no other value is specified and it means that an instant response is expected.

## Sample

This example checks the status of the reporting engine. The expected response time should be 2 minutes.

```
trcmd.bat -checkstatus -reportingEngine -minutesToWait 2
```

## trcmd -convert

The **-convert** command flag for the **trcmd** command allows you to convert existing BIRT reports into Cognos draft reports. A draft report includes some elements of BIRT reports, such as layout and style, and is used as a basis for the creation of a fully-fledged Cognos report. It cannot be used for Cognos reports.

## Syntax

**trcmd -user** *userID* **-password** *password* **-namespace** *authentication namespace*  
**-convert -report** *cognosSearchPath* [**-parameters** *p1 p2 p3..*] **imagesDir**  
*images\_directory* [**-help**]

### Note:

1. Authentication with **-user** *userID* and **-password** *password* is required.
2. If you have installed Tivoli Common Reporting in distributed installation, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify **-namespace** value. By default, **-namespace** points to VMMPProvider.
4. Before converting a BIRT report, ensure that it has properly configured data sources and that it can be run without errors.

**Restriction:** After the conversion, a report may not run properly. This is a normal situation. In such case, complete the report conversion in Report Studio to be able to run it.

## Arguments

### **-imagesDir** *images\_directory*

Specifies the location where the images generated by a BIRT report will be copied during the conversion. After the conversion, you will need to copy the images to the right folders. This parameter is optional for single-box installation and when you run this command on the computer where the user interface is installed. If you run this command on the computer where the reporting engine is installed, this parameter is obligatory.

**Important:** If you are running this command on the computer with the user interface, you must copy the images to the computer where the reporting engine is installed if you want them to display in PDF reports.

### **-parameters** *p1 p2 p3..*

A list of parameter values used for running the report, separated by spaces. These values override any default values specified in the report or report design. Each parameter value must be specified using the following format:  
param=value

If the value contains spaces, enclose the parameter in double quotation marks:  
"param=spaced value"

Each parameter must correspond to a valid parameter specified in the report design. Note that the multivalued parameters are supported, for example:

`-parameters color=blue color=red`

There are two optional parameters available. These are the following:

### **-locale**

Specifies the language of the report, for example **-locale** *en* for English. To see the list of ISO codes for languages, or to search by code or language, go to <http://www.loc.gov/standards/iso639-2/langhome.html>. Find the 2-character ISO 639-1 code for your language.

### **-validateParams** *true*

When set to its default value *true*, enables checking of default report parameters. When set to *false*, requires you to specify the parameters that a report will use in detail, for example date format.

### **-report** *cognosSearchPath*

The unique search path of the report you want to run.

**Restriction:** The report chosen for conversion has to be a BIRT report. If you choose a Cognos report, the conversion will be aborted and you will receive an error message.

### **-help**

Displays syntax and usage information of a command flag.

There is an optional parameter available. This is the following:

### **-package** *cognosSearchPath*

This parameter allows you to choose the location where the converted report is saved, different from the original one. The package name specified must exist in Cognos.

## Examples

- This example converts a BIRT report named "IT Finances":

```
trcmd -user tipadmin -password your password -namespace VMMPProvider -convert -report
/content/package[@name='Sales and Retailers']/report[@name='IT Finances']
```

- This example converts a BIRT report named "IT Finances" and places it in a package named "Business Plan":

```
trcmd -user tipadmin -password your password -namespace VMMPProvider
-convert -report content/package[@name='Sales and Retailers']/
report[@name='IT Finances']
-package /content/package[@name='Business Plan']
```

## trcmd -datasource

Use the **-datasource** command flag for the **trcmd** command to add a data source or test data source connectivity.

**Important:** This command can be used for Cognos data sources only.

### Syntax

Use this syntax to add a new data source:

```
trcmd -datasource -add data_source_name [-connectionName connection_name]
[-connectionString connection_string] [-dbType DB2 | ORACLE | ODBC | XML]
[-dbName database_name [-collation collation_sequence]] [-signonName signon_name]
[-dbLogin database_login -dbPassword database_password] [-users
namespace1:username1 namespace2:username2] [-groups namespace1:groupname1
namespace2:groupname2] [-roles namespace1:rolename1 namespace2:rolename2] [-force]
[-hidden] [-help]
```

Use this syntax to test the data source connection with the database:

```
trcmd -datasource -test data_source_name [-connectionName connection_name]
[-signonName signon_name] [-dbLogin database_login -dbPassword
database_password]
```

**Tip:** The **-datasource** command is used for creating a new data source connection. If you want to modify an existing data source connection, you can do this with the **-force** flag using the existing connection's name. To modify the data source:

1. Obtain the name of the data source that you want to change.
2. Run the **-datasource** as if you were creating a new data source and use the **-force** flag. The flag modifies the data source by overwriting the existing data source.

#### Note:

1. Authentication with **-user** *userID* and **-password** *password* is required.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, **-namespace** points to VMMPProvider.

**Restriction:** Testing XML data sources is not supported by the command line.

### Arguments

**-add** *data\_source\_name*

Adds a new data source. When used with **-force**, overrides the existing data source.



**-connectionName** *connection\_name*

The name of the connection between the data source and the database. If you do not specify it when adding a new data source, the data source name will be used as connection name. If you do not specify it when testing the database connection with the data source, the first found connection will be used.

**-connection string** *connection\_string*

Specifies the parameters of the database connection. If you specify **-dbType**, **-connectionString** must contain database specific connection string. If you do not specify **-dbType**, **-connectionString** must contain fully qualified Cognos connection string.

**-collation** *collation\_sequence*

Specifies the collation sequence.

**-dbType**

Specifies the type of the database such as DB2, Oracle, ODBC, or XML. If you specify a database other than one of these, you must provide the exact Cognos connection string.

**-dbName** *database\_name*

Specifies the name of the database.

**-dbLogin** *database\_login*

The database login needed to access the database.

**-dbPassword** *database\_password*

Specifies the password needed to access the database.

**-force**

Overrides the data source, connection or sign-on if it already exists.

**-groups** *namespace1:groupname1 namespace2:groupname2*

Specifies the names of groups that can access the sign-on. If you omit *namespace*, the default Cognos namespace will be used.

**-hidden**

Hides the data source from other users.

**-help**

Displays syntax and usage information of a command flag.

**-roles** *namespace1:rolename1 namespace2:rolename2*

Specifies the names of roles that can access the sign-on. If you omit *namespace*, the default Cognos namespace will be used.

**-signonName** *signon\_name*

When used with the **-add** parameter, it specifies the sign-on name needed to access the database. If you do not use **-signonName**, *database\_login* name will be used as the sign-on name.

When used with the **-test** parameter, it specifies the sign-on name needed to access the tested database. If you do not specify it, the **-dbLogin** and **-dbPassword** parameters will be used as the sign-on name. If you omit **-signonName**, **-dbLogin**, and **-dbPassword**, the first sign-on on the list will be used to test the data source.

**-test** *data\_source\_name*

Tests the connection between the data source and the database.

**-users** *namespace1:username1 namespace2:username2*

Specifies users that can access the sign-on. If you omit *namespace*, the default Cognos namespace will be used.

## Example

This example adds a DB2 data source named "ITM" that can be accessed by "tipadmin" users belonging to a group named "Everyone":

```
trcmd.bat -user tipadmin -password XXX -dataSource -add ITM
-dbType DB2 -connectionName TDW -dbname ITM
-dblogin db2inst1 -dbpassword XXX -groups Everyone
-users VMMPProvider:tipadmin
```

This example tests the database connection of a data source named "ITM":

```
trcmd.bat -user tipadmin -password XXX -dataSource
-test ITM -dblogin otherdbuser -dbPassword XXXX
```

## trcmd -delete

The **-delete** command flag for the **trcmd** command deletes an arbitrary object in Content Store based on its search path. You can use this command for both Cognos and BIRT objects.

### Syntax

Use this syntax to delete an object from Content Store:

```
trcmd -delete -searchPath cognosSearchPath [-recursive] [-force] [-help]
```

#### Note:

1. Authentication with **-user** *userID* and **-password** *password* is required in all cases.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, the **-namespace** parameter points to VMMPProvider.

### Arguments

#### **-force**

Forces deletion of an object in case of problems by specifying whether Content Manager can consider the setPolicy permissions of a user when deciding if the user can delete a selected object. If used, the selected object will be deleted if the current user has either write or setPolicy permission for the selected object, the parent of the selected object, and every descendant of the selected object.

If not used, the selected object will be deleted if the current user has write permission for the selected object, the parent of the selected object, and every descendant of the selected object.

#### **-help**

Displays syntax and usage information of a command flag.

#### **-recursive**

Deletes an object together with its child objects.

#### **-searchPath** *cognosSearchPath*

The search path to the object that you want to delete.

### Examples

This example deletes the "Test Reports" folder and all its subfolders and reports.

```
tcrmd.bat -user tipadmin -password tipadmin -delete  
-searchPath "/content/package[@name='Tivoli Products']/folder[@name='Test Reports']"  
-recursive
```

## tcrmd -distribute

The **-distribute** command flag for the **tcrmd** command distributes a formatted report to a specified location on the server file system. You can use this command for both BIRT and Cognos reports.

### Syntax

```
tcrmd -distribute -report cognosSearchPath -location publishLocation [-parameters p1  
p2 p3 ...] [-format format] [-locale locale] [-imageDir imagePath] [-baseImageURL  
URL] [-help]
```

#### Note:

1. Authentication with **-user** *userID* and **-password** *password* is required.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, **-namespace** points to VMMPProvider

### Arguments

#### **-location** *publishLocation*

The fully qualified path to the directory where the formatted report is to be saved.

#### **-help**

Displays syntax and usage information of a command flag.

#### **-report** *report*

The unique name of the report you want to distribute. Only the specified report is distributed (drill-through reports are not included).

The following optional parameters are available:

#### **-baseImageURL**

The base URL to use in references to images in an HTML formatted report. This URL should reflect the location of the image files at the time the report is viewed. The default value is *./* (images are read from the same directory as the HTML file).

#### **-format** *format*

Specifies output format, for example: **-format** *HTML*. It is possible to specify multiple formats at one time, for example **-format** *PDF HTML*. If this parameter is not used, the output format of the report is PDF. The supported formats are: PDF, HTML, CSV, XML, XLS.

#### **-imageDir** *imagePath*

The location to use when saving image files used by an HTML formatted report. If you do not specify an image directory, images are saved in the same location as the distributed report.

**Note:** Each time a report is distributed to the file system, new image files are generated with unique file names. Existing image files in the target location are not overwritten. You must manually delete files generated by previous report runs when they are no longer needed.

**-locale** *locale*

Specifies the language of the report, for example **-locale en** for English. To see the list of ISO codes for languages, or to search by code or language, go to <http://www.loc.gov/standards/iso639-2/langhome.html> and find the two-character ISO 639-1 code for your language.

**-parameters** *p1 p2 p3 ...*

A list of parameter values used for producing the distributed report, separated by spaces. These values override any default values specified in the report or report design. Each parameter value must be specified using the following format:

*param=value*

If the value contains spaces, enclose the parameter in double quotation marks:

*"param=spaced value"*

Each parameter must correspond to a valid parameter specified in the report design.

**Examples**

- This example distributes a formatted PDF version of the DBAvail report, specifying several parameter values and the output location for the PDF file.

```
trcmd -distribute -report DBAvail -format PDF -location C:\tmp\reports\Q3Avail.pdf
      -parameters quarter=3 type=NTServers
```

**trcmd -import**

The **-import** command flag for the **trcmd** command imports BIRT and Cognos report packages and report designs. The type of a package is recognized automatically. This command can be used for single-box installation and on the reporting engine. It is not supported for other scenarios.

**Syntax**

Use this syntax to import a report package:

```
trcmd -import -bulk pkgFile [-reportSetBase rsBase] [-resourceBase resourceBase]
[-designBase designBase] [-help]
```

Use this syntax to import a report design and also create a new report associated with the design:

```
trcmd -import -design designPath [-resourceDir resourcePath] -reportSetBase rsBase
```

During Cognos reports import, the **-resourceBase**, **-designBase**, and **-resourceDir** parameters are ignored.

You can import a single Cognos report from an .xml file using the **-design** parameter.

**Note:**

1. Authentication by **-user** *userID* and **-password** *password* is required in all cases.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, **-namespace** points to VMMProvider.

## Arguments

### **-bulk** *pkgFile*

The local path and file name (including .zip extension) of the report package file to be imported.

### **-design** *designPath*

The local path of the design file to be imported.

### **-help**

Displays syntax and usage information of a command flag.

The following parameters are optional:

### **-reportSetBase** *rsBase*

A search path to the package where a report is to be imported.

### **-resourceBase** *resourceBase*

An optional base name for any resource directories imported from a report package. The base name for a resource directory is used as the name of the top-level parent directory for the resources in the package. Use this option to avoid naming conflicts when importing resources in a package that have the same names and locations as existing resources in the data store.

### **-designBase** *designBase*

An optional base name for any report designs imported from a report package. The base name for a report design is used as the top-level location for the designs in the package. Use this option to avoid naming conflicts when importing report designs in a package that have the same names and locations as existing designs in the data store.

### **-resourceDir** *resourcePath*

The path in the data store for imported resources.

## Examples

- This example imports a BIRT package named `avail_skills.zip` with its resource directory imported from `C:\download\sth\report`.

```
trcmd -import -bulk C:\download\sth\report\avail_skills.zip
-reportSetBase "/content/package[@name='myReportSetBase']"
-resourceBase "/content/package[@name='myResourceBase']"
-designBase "/content/package[@name='myDesignBase']"
-user tipadmin -password admin
```

## trcmd -list

The **-list** command flag for the **trcmd** command lists available items in the data store or shows detailed information about a specific item. You can use it for both BIRT and Cognos reports.

## Syntax

Use this syntax to list all available folders and packages, also the hidden ones:

```
trcmd -list {-reportSets [-showHidden] [-help]}
```

Use this syntax to list reports, folders, or packages associated with a specific folder or a package:

```
trcmd -list -reportSet cognosSearchPath {-reportSets | -reports} [-help]
```

Use this syntax to list all available reports:

**trcmd -list -reports [-help]**

Use this syntax to display detailed information about a specific report:

**trcmd -list -report** *cognosSearchPath* **[-help]**

Use this syntax to display authorizations to reports or packages for specified users.

**trcmd -list -authorizations -entity** *cognosSearchPath* **[-help]**

Use this syntax to list the data sources defined in Content Store:

**trcmd -list -dataSources [-help]**

Use this syntax to list the connections defined in the specified data source:

**trcmd -list -connections** *cognosSearchPathOrDataSourceName* **[-help]**

**Note:**

1. Authentication with **-user** *userID* and **-password** *password* is required in all cases.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, **-namespace** points to VMMPProvider.

## Arguments

**-authorizations**

Lists authorizations to reports, packages, and folders for specified users.

**-connections** *cognosSearchPathOrDataSourceName*

Lists connections defined for the specified data source. You can use the Cognos search path or data source name.

**-dataSources**

Lists data sources defined in Content Store.

**-entity** *cognosSearchPath*

The search path of an object in the Cognos Content Store.

**-help**

Displays syntax and usage information of a command flag.

**-report** *cognosSearchPath*

The Cognos search path of an existing report. The search path of each report can be found in the web interface in **Properties** view.

**-reports**

Lists available reports. When used with the **-reportSet** command flag, this argument displays the reports associated with the specified folder or package.

**-reportSet** *cognosSearchPath*

The search path of an existing folder or package.

### **-reportSets**

Lists available folders and packages. When used with the **-reportSet** flag, this argument displays the folders and packages that are children of the specified folder or package.

### **-showHidden**

Use this flag to see hidden reports and report sets, which by default are not shown in command line.

## **Examples**

- This example lists all available reports.

```
trcmd.sh -username tipadmin -password tipadmin -list -reports
```

- This example lists all child folders or packages of the Monitoring folder.

```
trcmd.sh -username tipadmin -password tipadmin -list  
-reportSet "/content/package[@name='Sales and Retailers']/"  
folder[@name='Monitoring']"  
-reportSets
```

- This example displays detailed information about the IT Finances report.

```
trcmd.sh -username tipadmin -password tipadmin -list  
-report "/content/package[@name='Sales and Retailers']/"  
folder[@name='Documentation Reports']/report[@name='IT Finances']"
```

- This example lists authorization to the Reporting Overview report for user tipadmin.

```
trcmd.sh -user tipadmin -password tipadmin -list -authorizations  
-entity "/content/package[@name='Common Reporting']/report[@name='Reporting Overview']"
```

## **trcmd -modify**

The **-modify** command flag for the **trcmd** command allows you to configure Tivoli Common Reporting with your data source information, so that the reports can use external data sources. Use this command for BIRT reports only.

### **Syntax**

Use this syntax to modify data sources associated with one or more reports:

```
trcmd -modify -dataSources -reports [-reportName cognosSearchPath]  
[-displayName displayNameQuery] [-dataSource p1 p2 p3] [-caseSensitive]  
-setDatasource p1 p2 p3 [-help]
```

**Tip:** To get the unique report name used in this command, run the “trcmd -list” on page 95 command. If reports from packages use a common library for the data source definition, you need to only run the command against one report.

### **Note:**

1. Authentication with **-user** *userID* and **-password** *password* is required.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, **-namespace** points to VMMPProvider.

## **Arguments**

### **-caseSensitive**

Specifies that case is respected when matching the search query.

**-dataSource** *p1 p2 p3 ...*

A list of data source properties separated by spaces. Use this argument to restrict the search results to include only data sources whose properties match any of the specified values. Each property value must be specified using the following format:

*property=value*

If the value contains spaces, use double quotation marks:

*"property=spaced value"*

Each property must be one of the following:

- name
- displayName
- comments
- odaDriverClass
- odaURL
- odaUser
- odaPassword
- odaJndiName

**-dataSources**

Modifies the properties of data sources matching the specified search criteria.

**-displayName**

Specifies the report or report set display name query to use when searching for matching reports or report sets.

**-help**

Displays syntax and usage information of a command flag.

**-reportName** *cognosSearchPath*

Specifies the search path to use when searching for matching report sets.

**-reports**

Specifies that you want to modify the properties of the data sources associated with reports that match the specified search criteria.

**-setDataSource** *p1 p2 p3 ...*

A list of new data source property values separated by spaces. Each property value must be specified using the following format:

*property=value*

If the value contains spaces, enclose the property in double quotation marks:

*"property=spaced value"*

Each property must be one of the following:

- name
- displayName
- comments
- odaDriverClass
- odaURL
- odaUser
- odaPassword
- odaJndiName



## Examples

This example changes the `odaDriverClass`, `odaURL`, `odaUser`, and `odaPassword` properties of the data source in the ITM: Top Resources by Utilization Summary report:

```
./trcmd.sh -user tipadmin -password tipadmin -modify -datasources -reports -reportname  
"/content/package[@name='Tivoli Products']/folder[@name='ITM 6.2 Reports']/  
folder[@name='Utilization']/  
report[@name='ITM: Top Resources by Utilization Summary']"  
-setdatasource odaDriverClass=com.ibm.db2.jcc.DB2Driver  
"odaURL=jdbc:db2://9.167.29.78:60000/WAREHOUS:currentSchema=ITMUSER;"  
odaUser=db2inst1 odaPassword=tcrl23test
```

**/content/package[@name='Tivoli Products']/folder[@name='ITM 6.2 Reports']/folder[@name='Utilization']/report[@name='ITM: Top Resources by Utilization Summary']"**

is the report that will be used as the base for changing the JDBC information. The report name is enclosed in double quotation marks because it contains spaces.

### **-setdatasource**

is the keyword specifying which parameters are to be changed in the JDBC datasource. All the parameters are in the NAME=VALUE format. Specify your own parameters.

## What to do next

You can now verify if the JDBC datasource was changed correctly using the list command. The example below lists the properties of the ITM: Top Resources by Memory Utilization report::

```
./trcmd.sh -user tipadmin -password tipadmin -list -report  
"/content/package[@name='Tivoli Products']/folder[@name='ITM 6.2 Reports']/  
folder[@name='Utilization']/report[@name='ITM: Top Resources by Memory Utilization']"
```

Report information is displayed including the properties that you changed.

## trcmd -run

The **-run** command flag for the **trcmd** command runs a report and saves the result as an output version. You can use this command for BIRT and Cognos reports.

### Syntax

```
trcmd -run -report cognosSearchPath [-format format] [-locale locale] [-parameters p1  
p2 p3 ...] [-validateParams true] [-help]
```

#### Note:

1. Authentication with **-user** *userID* and **-password** *password* is required.
2. If you have installed Tivoli Common Reporting in distributed scenario, you must use the **-namespace** parameter.
3. If you have configured more than one user repository, specify the **-namespace** value. By default, **-namespace** points to VMMProvider.
4. To run BIRT reports, use Cognos search path as a report name.

### Arguments

**-report** *cognosSearchPath*

The unique search path of the report you want to run.

Note that the search path for every Cognos report can be found in Cognos UI. For more information, see “Checking the search path of a report” on page 63.

**-parameters** *p1 p2 p3 ...*

A list of parameter values used for running the report, separated by spaces. These values override any default values specified in the report or report design. Each parameter value must be specified using the following format:  
*param=value*

If the value contains spaces, enclose the parameter in double quotation marks:  
*"param=spaced value"*

Each parameter must correspond to a valid parameter specified in the report design.

Note that multivalued parameters are supported, for example:

**-parameters** *color=blue color=red*

There are four optional parameters available. These are the following:

**-format** *format*

Specifies output format, for example: **-format** *HTML*. It is possible to specify multiple formats at one time, for example: **-format** *PDF HTML*. If **-format** is not used, the output format is PDF. The supported formats are: PDF, HTML, CSV, XML, XLS

**-locale**

Specifies the language of the report, for example: **-locale** *en* for English. To see the list of ISO codes for languages, or to search by code or language, go to [www.loc.gov/standards/iso639-2/langhome.html](http://www.loc.gov/standards/iso639-2/langhome.html). Find the 2-character ISO 639-1 code for your language.

**-help**

Displays syntax and usage information of a command flag.

**-validateParams** *true*

When set to its default value *true*, enables checking of default report parameters. When set to *false*, requires you to specify the parameters that a report will use in detail, for example date format.

## Examples

- This example creates a snapshot of the DBAvail report, specifying several parameter values.

```
trcmd -run -report "/content/package[@name='package.zip']/  
report[@name='DBAvail']" -parameters "quarter=3" "type=NTServers"
```

**Note:** On UNIX-like operating systems, it is essential that you add double quotation marks for the parameters, even though there is no space in them.

## trcmd -version

The **-version** command flag for the **trcmd** command shows current version and build information for Tivoli Common Reporting.

## Syntax

**trcmd -version**

## Arguments

This command flag has no arguments.

## stopTCRserver

The **stopTCRserver** command stops the Tivoli Common Reporting server.

### Syntax

Use this syntax to stop the server:

**Windows** **stopTCRserver.cmd.**

**UNIX**

**Linux** **startTCRserver.sh.**

#### Note:

1. Run this command from the *TCR\_component\_dir\bin* directory.
2. Authentication with **-user** *userID* and **-password** *password* is required. Use the same user that you used to install Tivoli Common Reporting.
3. If you have installed Tivoli® Common Reporting in distributed installation, you must use the **-namespace** parameter

**Tip:** The **startTCRserver.cmd** and **startTCRserver.sh** scripts start both the Tivoli Common Reporting server and the Cognos Content Store. You can start the server using the Tivoli Integrated Portal scripts or other scripts, however those scripts do not start the Content Store. To start the server using a script other than the **startTCRserver** script, before you start the server, you must run additional commands to start the Content Store. For details, see the content of the **startTCRserver.cmd** and **startTCRserver.sh** scripts.

## startTCRserver

The **startTCRserver** command starts the Tivoli Common Reporting server.

### Syntax

Use this syntax to start the server:

**Windows** **startTCRserver.cmd** [**wait** *number of minutes*]

**UNIX**

**Linux** **startTCRserver.sh** [**wait** *number of minutes*]

#### Note:

1. Run this command from the *TCR\_component\_dir\bin* directory.
2. Authentication with **-user** *userID* and **-password** *password* is required. Use the same user that you used to install Tivoli Common Reporting.
3. If you have installed Tivoli® Common Reporting in distributed installation, you must use the **-namespace** parameter

**Tip:** The **startTCRserver.cmd** and **startTCRserver.sh** scripts start both the Tivoli Common Reporting server and the Cognos Content Store. You can start the server

using the Tivoli Integrated Portal scripts or other scripts, however those scripts do not start the Content Store. To start the server using a script other than the `startTCRserver` script, before you start the server, you must run additional commands to start the Content Store. For details, see the content of the `startTCRserver.cmd` and `startTCRserver.sh` scripts.

## Parameters

**wait** *number of minutes*

Specifies the time to wait until the reporting engine initializes completely. If the reporting engine does not initialize in the specified number of minutes, the script stops monitoring the engine and exits. If the reporting engine initializes before the timeout, the script exists when it detects that the reporting engine has initialized.

## Examples

- This example starts the Tivoli Common Reporting server and waits 5 minutes until the reporting engine initializes:  
`startTCRserver.sh wait 5`

---

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